



**BOEING REALTY CORPORATION  
FORMER C-6 FACILITY  
LOS ANGELES, CALIFORNIA**

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**TECHNICAL MEMORANDUM**

**Quarterly Report No. 3**

**Second Quarter 2002**

**Extended Soil Vapor Extraction Pilot Testing and Full-Scale System Start-Up**

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**To: Mr. Brian Mossman  
Boeing Realty Corporation  
3855 Lakewood Blvd.  
Building 1A MC D001-0097  
Long Beach, CA 90846**

**From: Haley & Aldrich, Inc.**

**Date: July 26, 2002**

**Re: Quarterly Report No. 3, Second Quarter 2002, Extended Soil Vapor Extraction Pilot  
Testing and Full-Scale System Start-Up, Boeing Realty Corporation, Former C-6 Facility  
– Parcel C, Los Angeles, California**

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Haley & Aldrich, Inc. has prepared this report to summarize extended soil vapor extraction (SVE) pilot test activities and full-scale system start-up conducted at the former Boeing C-6 Facility (subject property), in Los Angeles, California. During the period of April 1, 2002 through June 30, 2002, extended pilot testing was conducted in the following area:

- Former Building 2

During the period of May 15, 2002 through June 7, 2002, full-scale SVE system start-up was conducted in the following area:

- Former Building 1/36

This technical memorandum summarizes system operations, field measurements, vapor sampling and analysis, mass removal, extraction well optimization, and planned future SVE operations.

**BACKGROUND**

Laboratory results for soil samples collected in the former Building 1/36 and Building 2 areas at the subject property indicated the presence of volatile organic compounds (VOCs) at depth requiring remediation to prevent possible impact to groundwater. Based on the results of the investigation, shallow occurrences of impacted soil (less than 12 feet below ground surface) were excavated and disposed of at an approved facility. SVE was

recommended for the remediation of deep impacted soil. Haley & Aldrich was contracted by BRC to install and operate two extended SVE pilot tests to obtain data for the evaluation of using SVE as a full-scale remedy. Workplans for the pilot test activities in the Building 1/36 and Building 2 areas were submitted and approved by the Regional Water Quality Control Board, Los Angeles Region (LARWQCB) in May and September, 2001, respectively.

Initial pilot testing was completed in the Building 1/36 area in March 2002. An interim action SVE system was installed in the Building 1/36 area in April 2002. A workplan for the implementation of the interim remedial action SVE system was submitted and approved by the LARWQCB in October 2001.

## **BUILDING 1/36**

Site grading began in October 2001 in the vicinity of the SVE pilot test system, therefore all of the initial wells were abandoned. At the end of November 2001, one dual-completion well (1-VEW-24A and B) was re-installed and the pilot test system once again began operation. An additional forty-one dual and single completion wells (1-VEW-1 through 1-VEW-26) were installed during the month of January 2002 as part of an SVE system scale-up. The location of the Building 1/36 SVE system is shown in Figure 1. The well field layout, including well screen depths is shown on Figure 2.

The Building 1/36 expanded SVE system consists of forty-three 3-inch diameter, single and dual-completion, SVE wells, a trailer-mounted, 1,000-standard cubic feet per minute (scfm) blower system, three 8,000-lb granular activated carbon (GAC) vapor control vessels (primary, secondary, and stand-by), and associated piping. Haley & Aldrich began system operation on May 15, 2002.

Operations for the second quarter 2002 covered the period May 15, 2002 to June 7, 2002. During this period, the system operated with an up-time efficiency of 90% and removed a total of approximately 4,196 lbs. of VOCs. Three GAC changeouts, 8,000 lbs. each, were completed during this period on May 21 and May 29, 2002 (both vessels). On June 7, 2002, the system shut down due to apparent vandalism. Exothermic reactions on the GAC beds continued until June 12, when upon discovery, the beds over-heated and were quenched with water. Due to the GAC beds overheating, system damage occurred that requires repair prior to re-start. GAC was removed from all three vessels on June 13, 2002 and the system remains off pending corrective measures.

## **SECOND QUARTER 2002 SVE OPERATION SUMMARY – BUILDING 1/36**

Days of Operations	22
Available Days of Operation	24
Operational Time (%)	90
Mass Removed during Period (lbs)	4,196
Cumulative Mass Removed (lbs) (July '01-June '02)	9,189

## **OPERATIONS INFORMATION – BUILDING 1/36**

Operational data and VOC mass removal for the SVE system are tabulated and shown graphically in Attachment 1. The system operation timeline for the period is as follows:

- May 15, 2002 Full-scale system start-up
- May 18, 2002 System shutdown, west vessel switched into primary position, system restarted
- May 21, 2002 South GAC vessel was changed out (8,000 lbs), system restarted, south vessel as primary carbon

- May 27, 2002 System shut down, GAC breakthrough
- May 29, 2002 South and West GAC vessel were changed out (16,000 lbs), system restarted, west vessel as primary
- June 3, 2002 North vessel as primary and south vessel as secondary carbon, system modifications installed
- June 7, 2002 System shutdown due to apparent vandalism
- June 12, 2002 GAC bed over-heating and water quenching
- June 13, 2002 Additional quenching and GAC removal

Total days of operation for this period was approximately 22 with downtime due to apparent vandalism of the system and GAC over-heating. This equates to an up-time of approximately 90 percent when compared with the days available for operation as shown in Attachment 1, Graph 1.

During the period from May 15, 2002 through June 7, 2002, VOC vapors were drawn individually from all wells (VEW-1 through VEW-26B) with initial readings taken to calculate optimal flow and VOC removal at the wellheads. The process flowrates ranged from approximately 364 to 1,060 scfm. Inlet vacuums ranged from 60 to 109 inches of water column (inches H<sub>2</sub>O).

For this reporting period, approximately 4,196 lbs. of VOCs were extracted from the SVE wells and treated with GAC during 503 hours of operation as shown in Attachment 1, Graph 2. Since July 2, 2001 (initial small-scale pilot test start-up) approximately 9,189 lbs. of VOCs have been extracted during approximately 3,873 hours of initial and expanded SVE pilot test operation. Operation of the SVE system is in compliance with the site-specific permit from the South Coast Air Quality Management District (SCAQMD).

#### **FIELD MEASUREMENTS – BUILDING 1/36**

VOC concentrations were measured with a PID or flame-ionization detector (FID), calibrated to 100 parts per million by volume (ppmv) hexane, at the undiluted inlet, diluted inlet, between the GAC vessels, and at the exhaust stack. Flowrates were measured with a hand-held TSI Veloci-clac Plus hot-wire anemometer or direct reading pitot tube. Additional measurements were collected during operation including vacuum readings at each extraction well, pressures at the GAC vessels, and blower exhaust temperature. The field influent VOC concentration measurements are plotted in Attachment 1, Graph 3.

#### **VAPOR SAMPLING AND ANALYSIS– BUILDING 1/36**

For this period, two pairs of vapor samples were collected in Tedlar bags from the process air stream (inlet to primary GAC vessel and exhaust from the secondary GAC vessel) and delivered to a state-certified laboratory for analysis. These samples were collected for SCAQMD permit compliance as well as system performance evaluation. The vapor samples were collected using a Tedlar bag in a vacuum case. Laboratory analyses were conducted on vapor grab samples using EPA Method 8260B/TO-14A. The full results of the vapor sampling are summarized in Attachment 1, Tables 1, 2, and 3.

Based on the results of the laboratory analysis of vapor grab samples, maximum inlet VOC concentrations as parts per billion by volume (ppbv) for the period are as follows:

• 1,1,1 Trichloroethane (1,1,1 TCA)	220,000 ppbv
• Toluene	170,000 ppbv
• 2-Butanone (MEK)	150,000 ppbv
• 1,1 Dichloroethene (1,1 DCE)	83,000 ppbv
• Trichloroethene (TCE)	48,000 ppbv
• Methylene chloride	8,400 ppbv
• 1,1 Dichloroethane (1,1 DCA)	2,700 ppbv
• Xylene	2,500 ppbv
• Cis-1,2 Dichloroethene (Cis-1,2 DCE)	1,700 ppbv
• 1,2 Dichloroethane (1,2-DCA)	560 ppbv
• Tetrachloroethene (PCE)	260 ppbv
• Chloroform	240 ppbv
• Trichlorofluoromethane	150 ppbv

Reported influent concentrations varied during the period due to the effects of different operational configurations. Effluent vapor samples collected on May 21 and June 3 were within SCAQMD permit requirements with the exception of methylene chloride on June 3, 2002. The SVE system is currently off.

#### **EXTRACTION WELL OPTIMIZATION – BUILDING 1/36**

Well optimization was conducted during system start-up. One round of VOC concentrations were measured by FID at each extraction well at various flowrates during this quarter. These data were used to establish the flow regime under which maximum VOC concentrations can be extracted from the wells. All extraction wells were operated in May-June (within permit limitations) for approximately one month at flow regimes generating the maximum concentration per flowrate. Wells exhibiting lower concentrations, which do not significantly contribute to mass removal, were closed so that the available SVE system flow capacity could be used for the higher concentration wells. Well optimization curves are plotted on Figures 4 and 5.

#### **ACTIVITIES FOR NEXT QUARTER – BUILDING 1/36**

Over-heating of the GAC beds is thought to be the result of higher than expected concentrations of 2-Butanone or methyl-ethyl ketone (MEK) in extracted vapors over the last week of operations in the Building 1/36 area. System shutdown by vandalism further prevented excess heat from being carried away by air flow. This process can be controlled by carefully monitoring operating conditions such as MEK influent concentrations, exit gas temperatures, and carbon monoxide (CO) concentrations in the GAC vessels. Safety features such as the installation of a cooling air blower, process monitors and control logic, and a water quench system are also recommended. Haley & Aldrich and Boeing Realty Corporation (BRC) are currently undertaking the design and procurement of SVE system modifications to facilitate continuation of GAC-based SVE in the Building 1/36 area. Re-start of the Building 1/36 system will include vapor sampling of wells to isolate the MEK-impacted area. System re-start is anticipated in September, 2002.

A Third Quarter 2002 report summarizing activities during the period July 2002 through September 2002 will be prepared and submitted in October 2002.

#### **BUILDING 2**

The Building 2 extended pilot test system consists of seventeen 2-inch diameter, PVC, single and dual-completion SVE wells, a trailer-mounted, 800-actual cubic feet per minute (acfm) blower system, two 3,000-lb GAC vapor control vessels (primary and secondary), and associated piping. Haley & Aldrich installed the initial pilot test wells

in September 2001 and began system operation on November 27, 2001. Two additional dual-completion extraction wells (2-VEW-16A/B and 2-VEW-17A/B) were installed on May 1, 2002. The multiple locations SCAQMD permit was modified to allow an increase in total flow rate to 890 scfm. The location of the Building 2 pilot test is shown in Figure 1. The well field layout, including well screen depths is shown on Figure 3.

Operations for the first quarter 2002 covered the period April 1, 2002 to June 30, 2002. During this period, the system operated with an up-time efficiency of 93% and removed a total of approximately 810 lbs. of VOCs. Five GAC changeouts, 3,000 lbs. each, were completed during this period on April 4 (both vessels), May 2, May 16, and May 13, 2002.

During this quarter, approximately 300 gallons of water were collected from the knockout system. A double-contained polyethylene tank was installed at the site to temporarily store knockout water.

#### **FIRST QUARTER 2002 SVE OPERATION SUMMARY – BUILDING 2**

Days of Operations	85
Available Days of Operation	91
Operational Time (%)	93
Mass Removed during Period (lbs.)	810
Cumulative Mass Removed (lbs.) (Nov'01-June'02)	2,607

#### **OPERATIONS INFORMATION – BUILDING 2**

Operational data and VOC mass removal for the extended SVE pilot test system are tabulated and shown graphically in Attachment 2. The system operation timeline for the period is as follows:

- April 4, 2002 System shutdown, two GAC vessels were changed out (6,000 lbs), system restarted
- April 14, 2002 System shutdown unattended due to low flow switch
- April 17, 2002 System restarted
- May 1, 2002 System shutdown due to carbon breakthrough, Wells 2-VEW-16 and 2-VEW-17A and B were completed
- May 2, 2002 One GAC vessel was changed out (3,000 lbs), system restarted
- May 16, 2002 System shutdown, one GAC vessel was changed out (3,000 lbs), system restarted
- June 7, 2002 SCAQMD issued a new permit A/N 401433
- June 13, 2002 System shutdown, one GAC vessel was changed out (3,000 lbs), system restarted

Total days of operation for this period was approximately 85 with intermittent downtime due to GAC changeout. This equates to an up-time of approximately 93 percent when compared with the days available for operation as shown in Attachment 2, Graph 4.

During the period, VOC vapors were drawn from 2-VEW-3B, 4, 5, 6, 7A, 7B, 8A, 8B, 9, 10A, 10B, 11B, 12, 13B, 14B, 15B with valves open to optimized flow rates and concentrations at each of the wellheads. Individual optimal SVE well flow rates ranged from 5 to 98 scfm for a total flow rate from the well field of 630 to 710 scfm. Well optimization is discussed further below. The process flowrates ranged from 630 to 740 scfm. Inlet vacuums ranged from 41 to 65 inches H<sub>2</sub>O.

For this reporting period, approximately 810 lbs. of VOCs were extracted from the SVE wells and treated with

GAC during 2,023 hours of operation. Since November 27, 2001 approximately 2,607 lbs. of VOCs have been extracted during approximately 4,634 hours of operation. Effluent vapor samples collected on June 4 were within SCAQMD permit requirements with the exception of Toluene under the previous permit. 1,1-DCE exceeded previous permit conditions on June 4, 2002. GAC was changed out on June 13, 2002.

## **FIELD MEASUREMENTS – BUILDING 2**

VOC concentrations were measured with a PID and/or FID, calibrated to 100 ppmv hexane, as per the SCAQMD permit requirements, at the undiluted inlet, diluted inlet, between the GAC vessels, and at the exhaust stack. Flowrates were measured with a hand-held TSI Veloci-calc Plus hot-wire anemometer or by measuring the pressure differential across an orifice plate. Additional measurements were collected during operation including vacuum readings at each extraction well, pressures at the GAC vessels, and blower exhaust temperature. The field influent VOC measurements are plotted in Attachment 2, Graph 5.

## **VAPOR SAMPLING AND ANALYSIS – BUILDING 2**

For this period, twelve vapor samples were collected in Tedlar bags from the process air stream (inlet to primary GAC vessel and exhaust from the secondary GAC vessel) and delivered to a state-certified laboratory for analysis. These samples were collected for SCAQMD permit compliance as well as system performance evaluation. The vapor samples were collected using a Tedlar bag in a vacuum case. Laboratory analyses were conducted on vapor grab samples using EPA Method 8260B/TO-14A. The full results of the vapor sampling are summarized in Attachment 2, Tables 4, 5, and 6.

Based on the results of the laboratory analysis of vapor grab samples, maximum inlet VOC concentrations as ppbv for the period are as follows:

• Trichloroethene (TCE)	19,000 ppbv
• 1,1 Dichloroethene (1,1 DCE)	1,700 ppbv
• Chloroform	640 ppbv
• Trichloroethane (1,1,1 TCA)	560 ppbv
• Toluene	520 ppbv
• Tetrachloroethene (PCE)	190 ppbv
• Cis-1,2 Dichloroethene (cis-1,2-DCE)	120 ppbv
• 1,1 Dichloroethane (1,1-DCA)	96 ppbv
• Methylene Chloride	49 ppbv
• Trichlorofluoromethane	45 ppbv
• Xylene	18 ppbv

Reported influent concentrations varied during the period due to system optimization efforts.

## **EXTRACTION WELL OPTIMIZATION – BUILDING 2**

Data collection and adjustment of extraction well flow rates began in November 2001. Well optimization continued during the second quarter of 2002. One round of VOC concentrations were measured at each extraction well by PID at various flowrates during this quarter. These data were used to establish the flow regime under which maximum VOC concentrations can be extracted from the wells. Sixteen extraction wells exhibiting the highest VOC concentrations were operated in April through June (within permit limitations) at flow regimes generating the maximum concentration per flowrate. Wells exhibiting lower concentrations, which do not significantly contribute to mass removal, were closed so that the available SVE system flow capacity could be used for the higher concentration wells. Figure 6 illustrates the remediation progress since November 2001.

## ESTIMATED SVE OPERATION DURATION – BUILDING 2

In an effort to predict the asymptotic VOC concentrations and identify the time at which continued operation becomes impractical, a regression analysis of available data was performed and refined. Undiluted influent vapor concentration data was used in the regression analysis to estimate the remaining period of operation for the Building 2 SVE system, based on mass removal rate and concentration targets. The analysis was conducted according to the following regression equation:

$$M_t = M_o e^{(-kt)}$$

Where:

$M_t$  = mass removal rate (lbs./day) at time  $t$  (days)

$M_o$  = initial regressed mass removal rate (lbs./day)

$k$  = exponential rate constant ( $\text{day}^{-1}$ )

$t$  = time (days)

Two limiting endpoints were defined as the times at which a 90% and a 99% reduction in the regressed initial mass removal rate will occur ( $t_{90\%}$  and  $t_{99\%}$ ), assuming an exponential decline.

$$t_{90\%} = 2.303 / k$$

$$t_{99\%} = 4.605 / k$$

Based on the above calculations and data collected through July 3, 2002, a 90% reduction in the regressed initial mass removal rate is predicted to occur after approximately two additional months of operation in August-September 2002 (Attachment 2, Graph 7). A 99% reduction in the regressed initial mass removal rate is predicted to occur after approximately seven additional months of operation in January-February 2003. These results extend the predicted 90% and 99% removal dates by approximately one month when compared to previous predicted dates.

The above model was also applied to VOC concentration data from each extraction well. Data for the extraction wells is based on PID readings at the wellheads and includes more data points. An average rate constant for the group was calculated as follows:

$$C_t = C_o e^{(-kt)}$$

Where:

$C_t$  = concentration (ppmV) at time  $t$  (days)

$C_o$  = initial regressed concentration (ppmV)

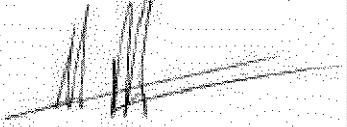
Based on data collected to-date, a 90% reduction in the initial regressed well concentrations occurred in March or April 2002 (Attachment 2, Graph 8). Measured concentrations have decreased at least 90% in most of the wells based on second quarter 2002 monitoring. A 99% reduction in the initial regressed well concentrations is predicted to occur in July or August 2002 based on the latest data. These estimates extend the time period by approximately one month over previous estimates and will be refined over the next quarter as VOC concentrations continue to decline.

## ACTIVITIES FOR NEXT QUARTER – BUILDING 2

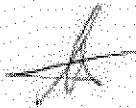
The extended SVE pilot test will continue operation on SVE wells selected to maximize mass removal. GAC changeouts will be conducted as necessary. Data collected will be applied to the regression model to further refine the predicted time when asymptotic concentrations and mass removal levels will be reached. A Third Quarter 2002 report summarizing activities during the period July 2002 through September 2002 will be prepared and submitted to BRC in October 2002.

We appreciate the opportunity to provide environmental consulting services on this project. Please do not hesitate to call if you have any questions or comments.

Sincerely yours,  
HALEY & ALDRICH, INC.



Richard M. Farson, PE  
Senior Engineer



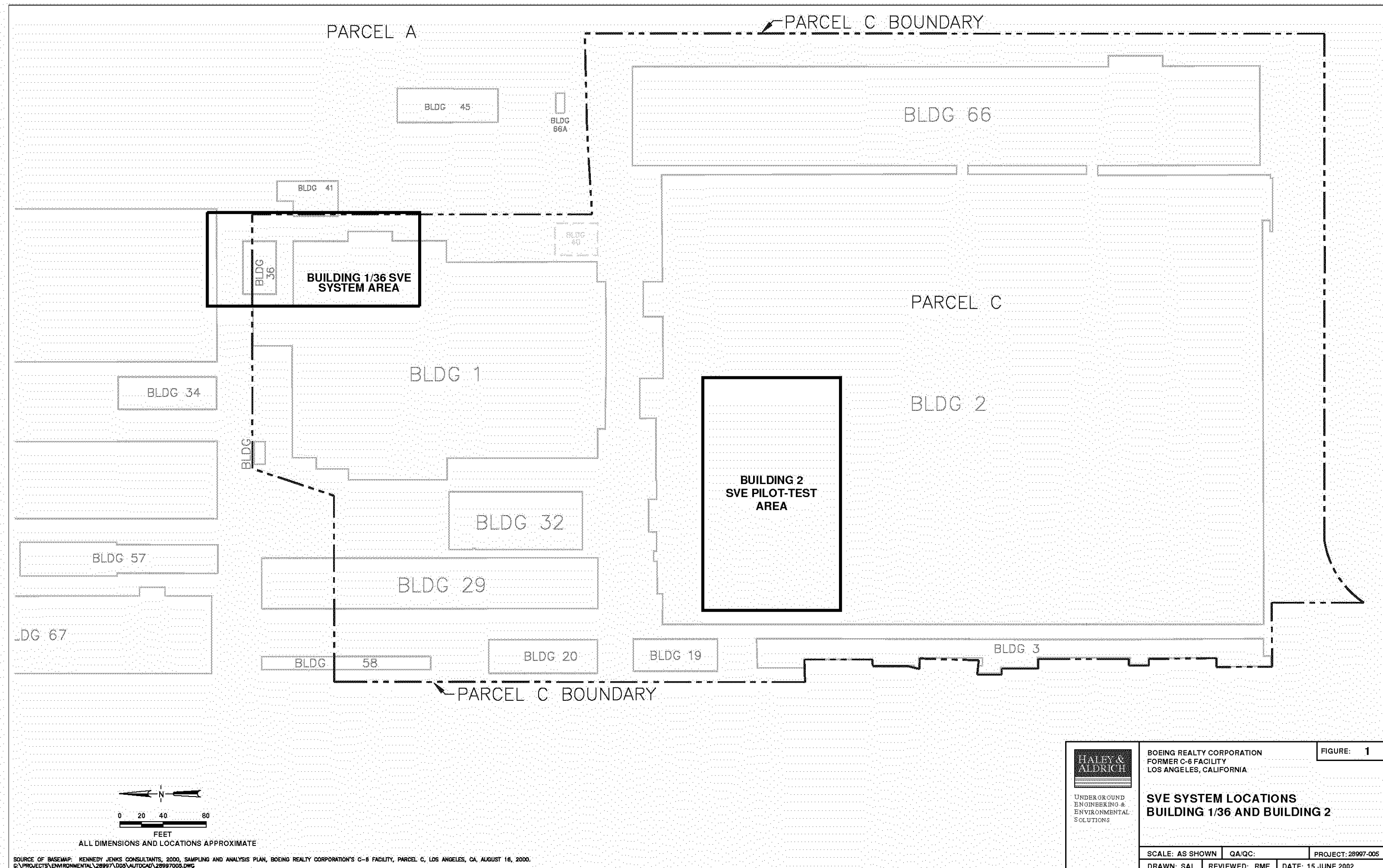
Scott P. Zachary  
Project Manager

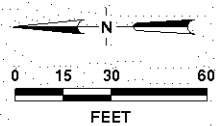
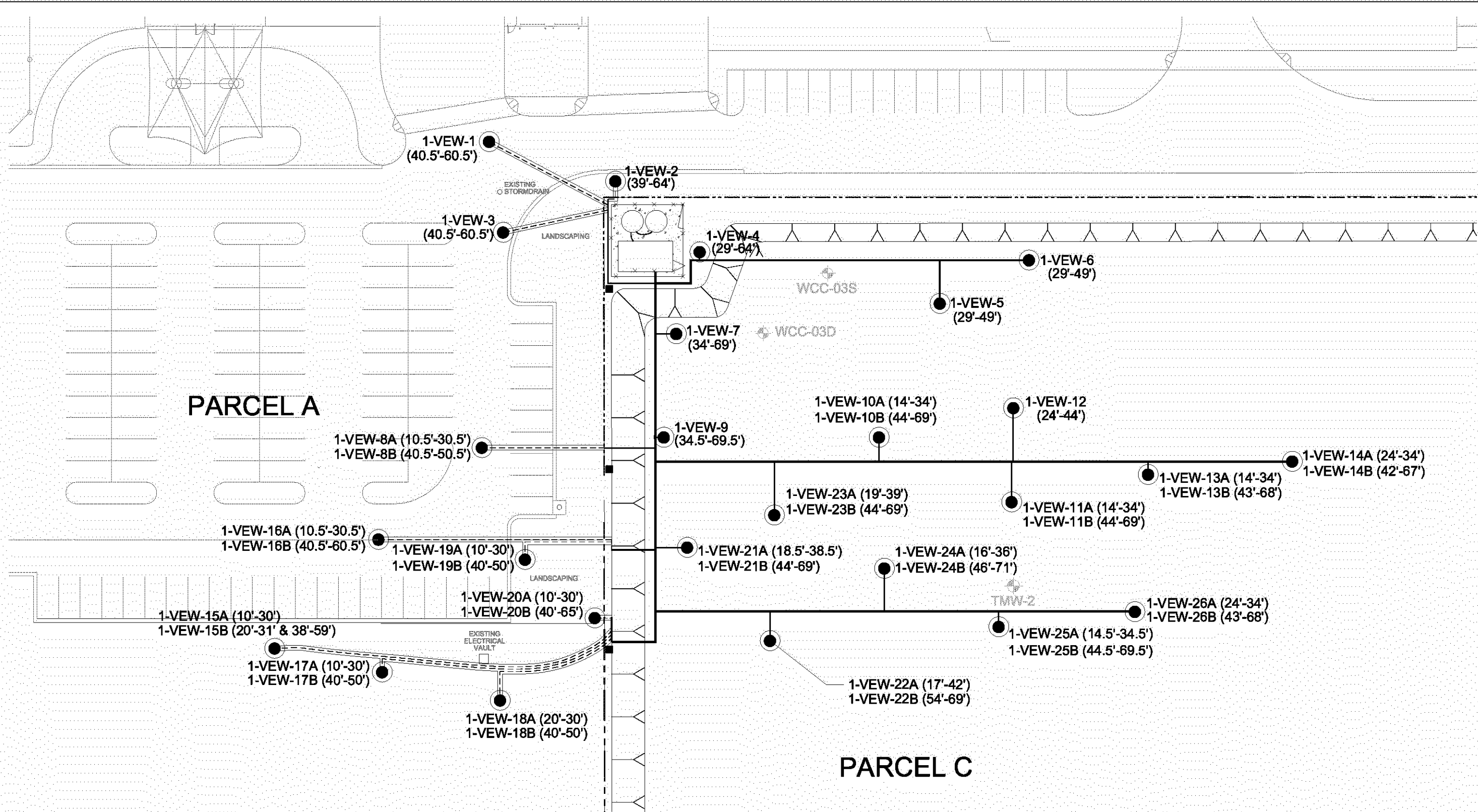
Enclosures:

- Figure 1 – SVE System Locations Building 1/36 and Building 2
- Figure 2 – Building 1/36 SVE System Diagram
- Figure 3 – Building 2 SVE Pilot Test System Diagram
- Figure 4 – Building 1/36 Full-Scale System, Flow vs. Concentration (Very High and High)
- Figure 5 – Building 1/36 Full-Scale System, Flow vs. Concentration (Medium and Low)
- Figure 6 – Building 2 SVE Pilot Test System Contours
- Attachment 1 – Building 1/36 SVE Operational Data
- Attachment 2 – Building 2 SVE Operational Data

cc: John Scott, Boeing  
Scott Zachary, Haley & Aldrich  
Richard Farson, Haley & Aldrich  
File





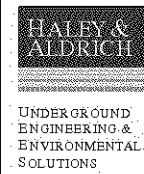


NOTE: ALL DIMENSIONS AND LOCATIONS APPROXIMATE

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LEGEND

- |                        |           |                               |
|------------------------|-----------|-------------------------------|
| --- PROPERTY LINE      | TMW-2     | EXISTING G.W. MONITORING WELL |
| — ABOVE GROUND PIPING  | ●         | VAPOR EXTRACTION WELL         |
| == BELOW GROUND PIPING | (40'-65') | SCREEN INTERVAL               |
| TO POSITIVE SLOPE      |           |                               |



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**BUILDING 1/36  
SVE SYSTEM DIAGRAM**

SCALE: AS SHOWN

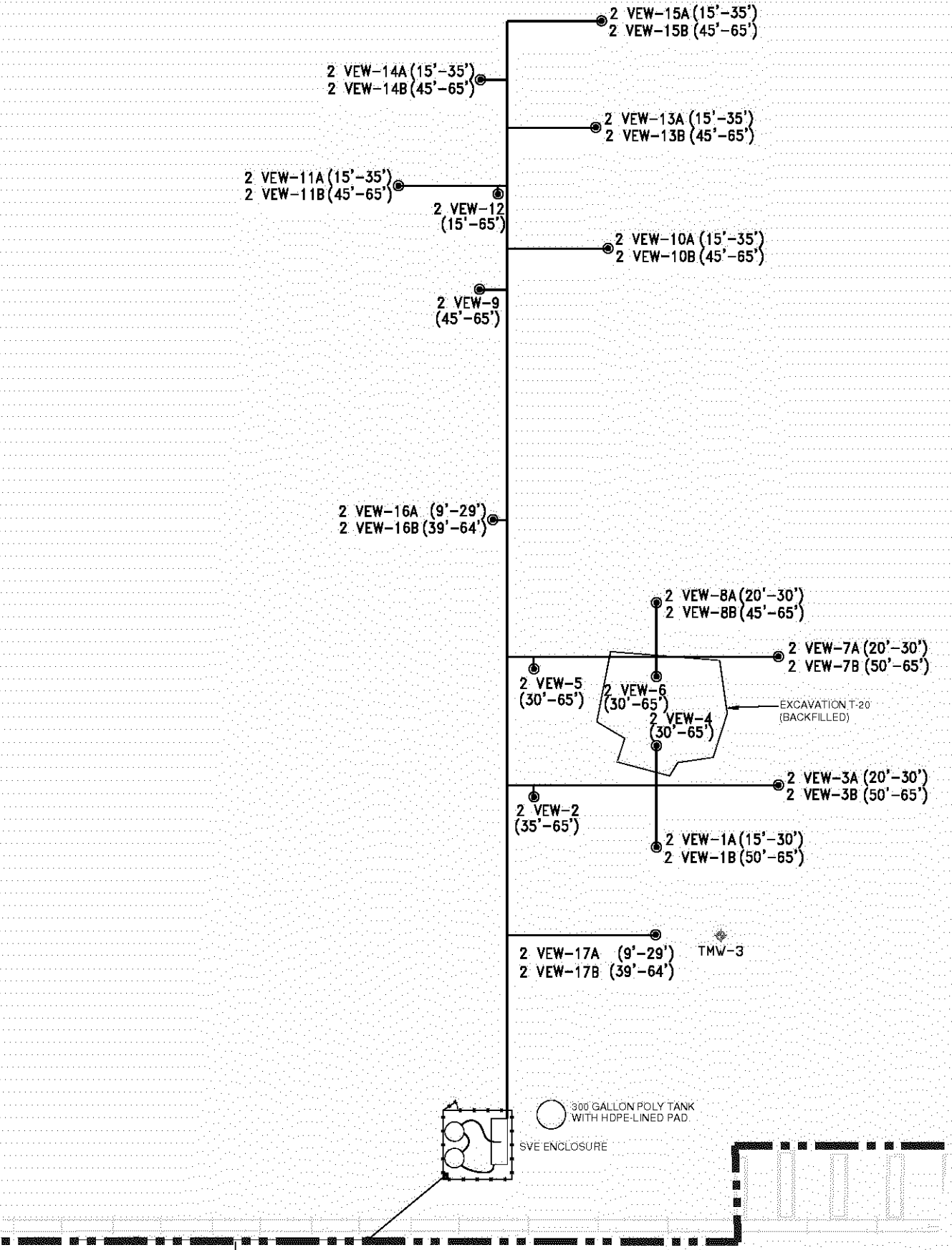
PROJECT: 28997-003

DRAWN: SAL

REVIEWED: RMF

DATE: 15 JUNE 2002

FIGURE: 2



LEGEND

- VAPOR EXTRACTION WELL
- ⊕ GROUNDWATER MONITDR WELL
- ABOVE-GROUND PIPING
- (15'-30') SCREENED INTERVALS (FEET BELOW GROUND SURFACE)
- PPMV PARTS PER MILLION BY VOLUME

 UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS	BOEING REALTY CORPORATION FORMER C-6 FACILITY LOS ANGELES, CALIFORNIA		FIGURE: 3
	BUILDING 2 SVE PILOT TEST SYSTEM		
	SCALE: AS SHOWN	PROJECT: 28997-005	
DRAWN: SAL	REVIEWED: RMF	DATE: 15 JUNE 2002	

FIGURE 4  
BUILDING 1/36 FULL-SCALE SYSTEM  
FLOW VS. CONCENTRATION (VERY HIGH AND HIGH)

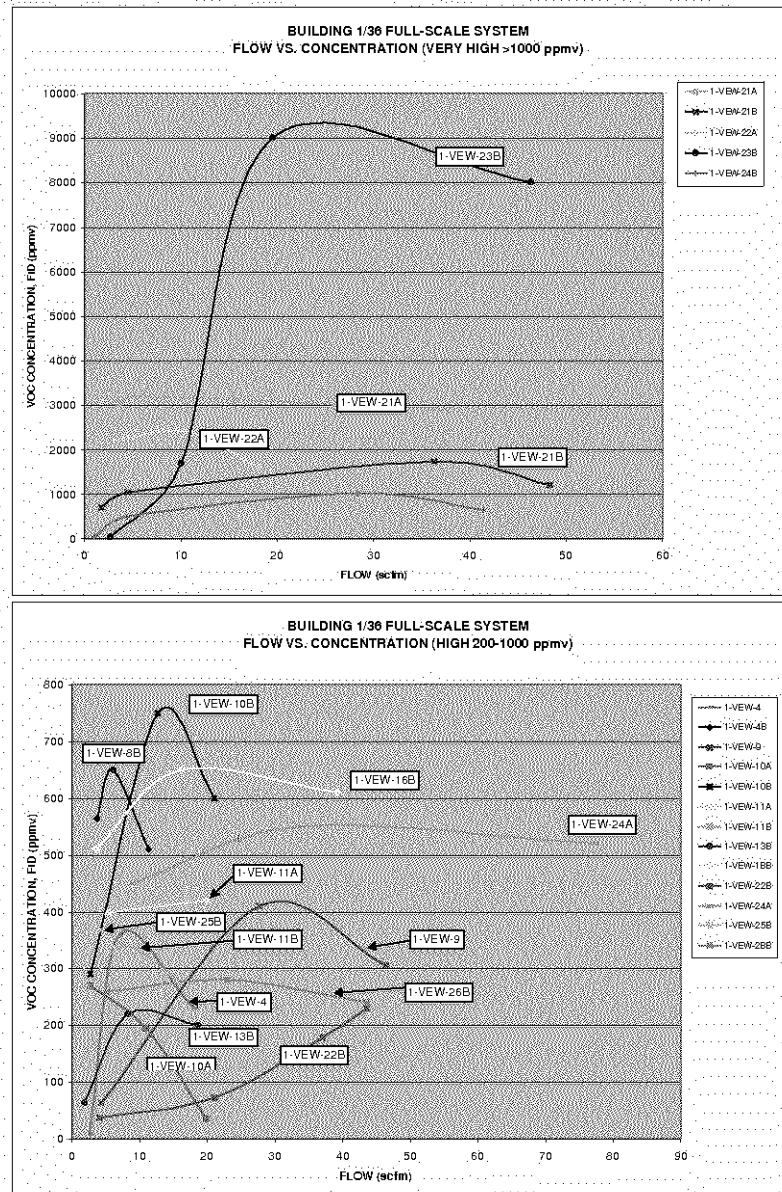
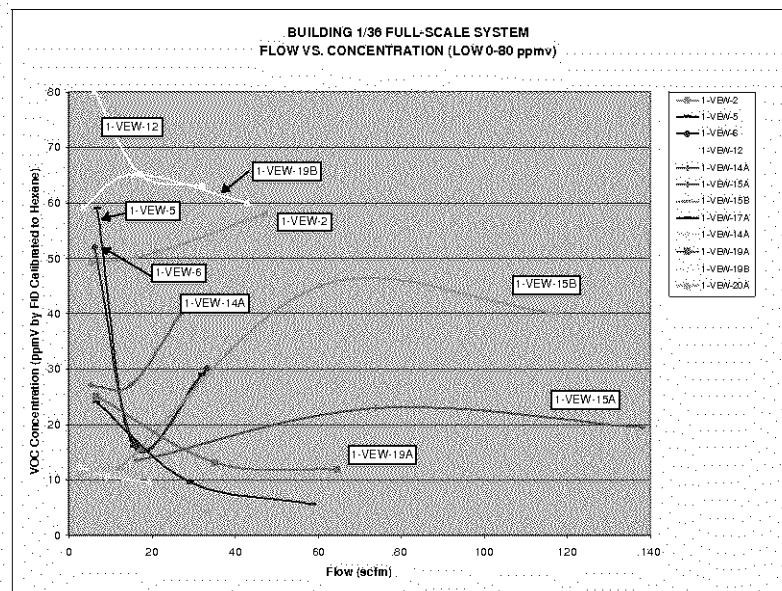
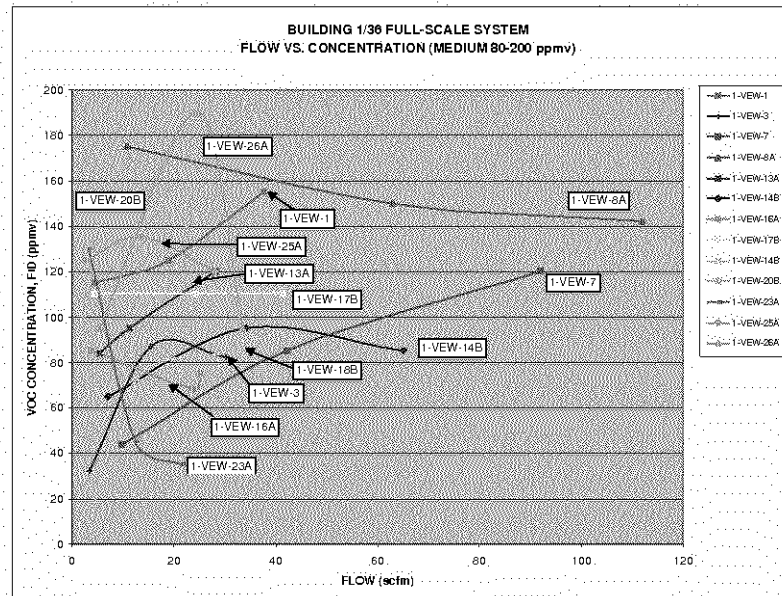
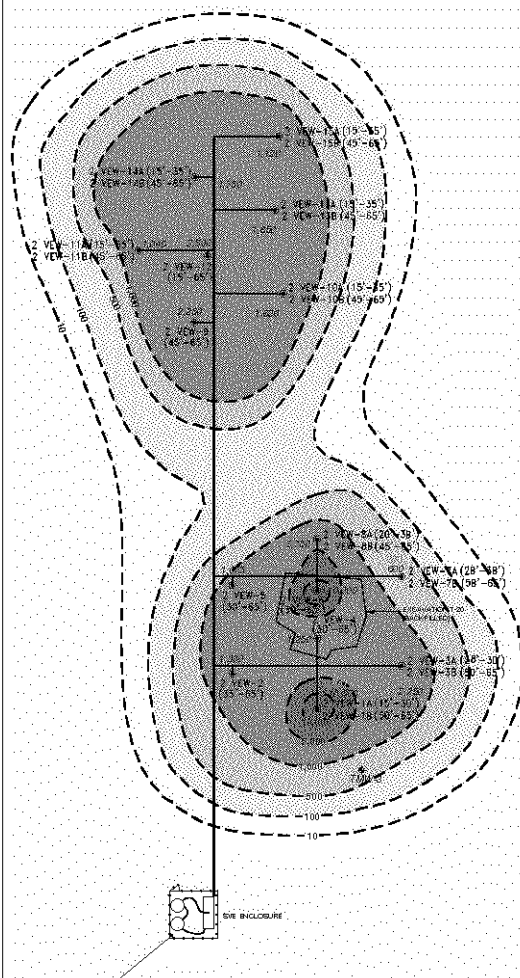
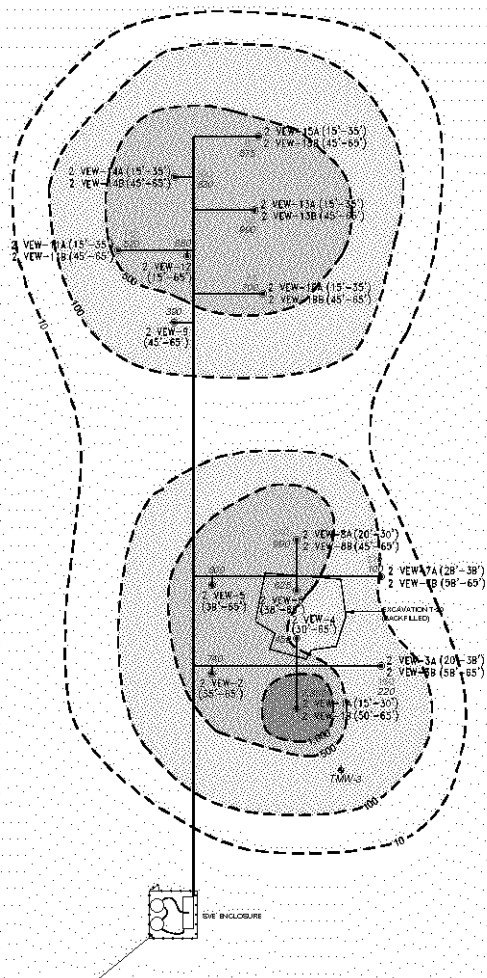


FIGURE 5  
BUILDING 1/36 FULL-SCALE SYSTEM  
FLOW VS. CONCENTRATION (MEDIUM AND LOW)

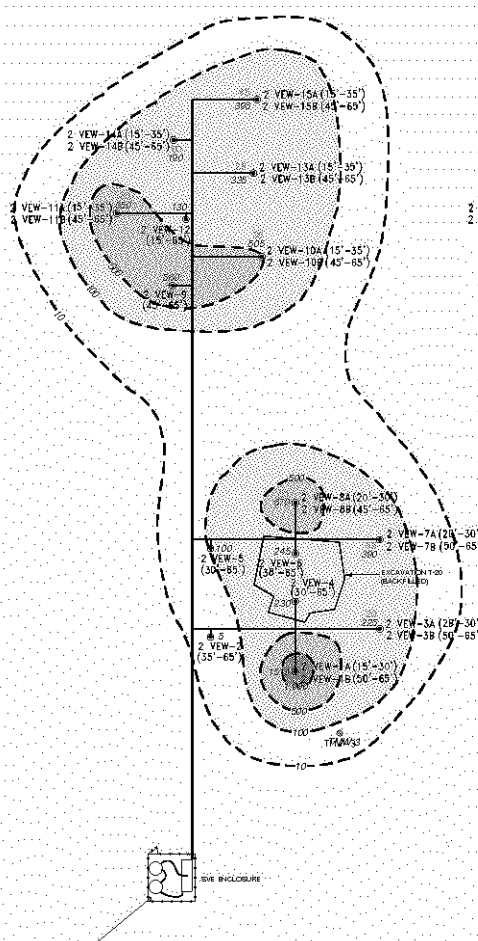




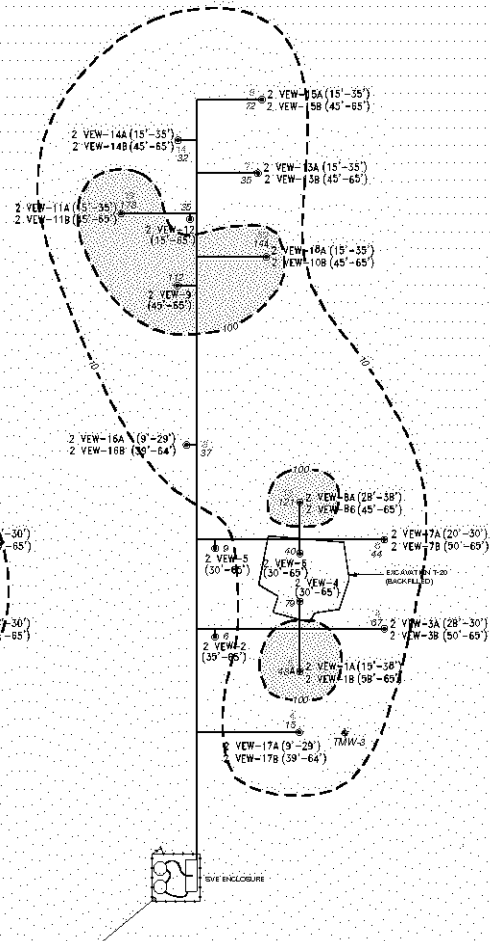
27 NOVEMBER 2001



3 JANUARY 2002



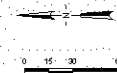
30 MARCH 2002



3 JULY 2002

#### LEGEND

SHALLOW	SVE - 10 PPBW - 100 PPBW
DEEP	SVE - 101 PPBW - 500 PPBW
VAPOR EXTRACTION WELL	SVE - 501 PPBW - 1,000 PPBW
GROUNDWATER MONITOR WELL	SVE - 1,001 PPBW - 5,000 PPBW
ABOVE-GROUND PIPING	SVE - 5,001 PPBW - 10,000 PPBW
(15'-30') SCREENED INTERVALS (FEET BELOW GROUND SURFACE)	SVE - 10,001+ PPBW
PPBW PARTS PER MILLION BY VOLUME	SVE CONCENTRATION CONTOUR



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LOS ANGELES, CALIFORNIA

FIGURE 6

BUILDING 2 SVE PILOT TEST  
SYSTEM CONTOURS - 27 NOV 01,  
3 JAN 02, 30 MARCH 02 & 3 JULY 02

SCALE: - PROJECT: 28997-003  
DRAWN: Sai REVIEWED: RM DATE: 26 JULY 2002

ATTACHMENT 1

BUILDING 1/36  
SVE OPERATIONAL DATA

**TABLE 1 - BUILDING 1/36 SVE SYSTEM INFLUENT LABORATORY DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

COMPOUND	SAMPLE DATE	1/3/2002	2/7/2002	3/6/2002	5/21/2002	6/3/2002
	SAMPLE TYPE	Diluted Inlet	Diluted Inlet	Inlet	Inlet	Inlet
	LAB ID	DILUTED_BLDG1_010302	DILUTED_BLDG1_010302	DILUTED_BLDG1_010302	GAC0001D_AV052102_000 1	GAC0001D_AV060302_000 2
1,1 Dichloroethene (ppbv)		32,000	140,000	140,000	83,000	43,000
Methylene chloride (ppbv)		ND	300	2,500	6,200	8,400
1,1 Dichloroethane (ppbv)		1,400	3,700	5,700	2,200	2,700
1,2 Dichloroethane (ppbv)		ND	250	560	ND	ND
cis-1,2 Dichloroethene (ppbv)		380	1,600	2,800	1,400	1,700
1,1,1 Trichloroethane (ppbv)		34,000	170,000	220,000	15,000	220,000
1,1,2 Trichloroethane (ppbv)		ND	120	ND	ND	ND
Trichloroethene (ppbv)		12,000	45,000	61,000	48,000	29,000
Tetrachloroethene (ppbv)		ND	190	1,600	260	ND
Toluene (ppbv)		1,800	81,000	210,000	22,000	170,000
2-Butanone (MEK)		ND	ND	ND	62,000	150,000
4-Methyl-2-pentanone (MIBK)		ND	ND	250	2,100	14,000
Xylene (ppbv)		ND	1,700	5,000	910	2,500

**Notes:**

ppbv = parts per billion by volume  
ND = Below method detection limits



# TABLE 2 - BUILDING 1/36 SVE SYSTEM FIELD DATA

Site Name: BRC Former C-6 Facility  
 Location: Torrance, California  
 System: Building 1/36 SVE system

DATE	HOUR	TIME	UNDILUTED FLOW RATE (1) (scfm)	UNDILUTED VACUUM (inches H2O)	DILUTED FLOW RATE (1) (scfm)	DILUTED INFLUENT CONC. FID (2) (ppmv)	MID PONT CARBON CONC. PID (2) (ppmv)	EFFLUENT CARBON CONC. PID (2) (ppmv)	COMMENTS
01/03/02	1625	13:15	32	48	200	320	0.0	0.0	
01/10/02	1794	14:00	30	17	200	390	0.1	0.0	
01/18/02	1980	8:30	3	15	184	760	0.0	0.0	
01/24/02	2127	11:00	93	15	178	>9,999	0.0	0.0	
01/31/02	2294	13:45	NR	13	175	4,000	63	0.0	GAC Changeout
02/07/02	2324	16:50	50	13	165	3,540	2	0.0	
02/15/02	2517	17:50	40	NR	170	3,600	26	0.1	
02/21/02	2661	17:44	47	13	170	4,300	240	0.0	GAC Changeout
02/27/02	2661	14:17	46	14	185	3,900	1.5	0.0	
03/06/02	2828	13:40	110	17	195	>9,999	45	0.2	GAC Changeout
03/13/02	2995	16:20	56	14	163	4,550	2	0.0	
03/20/02	3155	8:30	NR	19.5	183	3,700	2	0.2	
03/29/02	3371	8:15	60	13	166	2,864	57	0.2	System shut-down and removal
Pilot system removed									
05/15/02	5	16:50	985	96	995	375 *	0.1 *	0.7 *	
05/16/02	31	17:45	1040	91	1060	320 *	14.2 *	0.2 *	
05/17/02	55	17:20	915	69	985	310 *	0.0 *	0.1 *	
05/18/02	76	14:40	840	90	870	845	45.0	0.0	Primary vessel switched
05/19/02	97	11:40	875	88	905	780	18.0	10.0	
05/20/02	119	10:00	900	88	905	725	14.0	12.0	
05/21/02	143	14:50	935	72	975	160	34.0	7.5	GAC Changeout
05/22/02	169	17:10	925	77	950	330	9.8	7.0	
05/23/02	190	14:35	925	62	815	355	9.8	9.0	
05/24/02	208	8:41	403	61	400	1,250	13.0	12.0	
05/25/02	236	12:40	383	60	377	850	10.5	9.0	
05/26/02	259	11:20	392	61	364	1,000	13.0	11.8	
05/27/02	283	11:24	402	60	368	1,000	25.0	12.0	GAC Changeout
05/29/02	286	17:30	830	95	795	245 *	0.0 *	0.0 *	
06/03/02	400	10:00	780	109	760	350	60.0	7.5	Primary vessel switched
Carbon bed overheating discovered 6/12/02									

## Notes:

- (1) Direct flow readings taken by hand-held TSI Veloci-calc Plus or orifice plate
  - (2) Measurements taken with a Foxboro OVA-108 PID calibrated to 100 ppmv Hexane
- \* PID Adjusted to FID equivalents as Hexane by multiplying PID Reading by 0.35 (Hexane Equiv = PID Reading x PID CF X FID RF)
- scfm = standard cubic feet per minute  
 ppmv = parts per million by volume  
 NR = Not Recorded  
 > Greater than

**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-1	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.5	NA	"
	5/23/2002	11:21	4.41	9	115	Well Opened
	5/23/2002	12:38	18.9	40	125	"
	5/23/2002	14:19	37.6	96	155	"
	6/3/2002	10:00	39	90	51	"
1-VEW-2	3/6/2002	13:40	NA	0.5	NA	Well Closed
	3/29/2002	8:15	NA	1	NA	"
	5/23/2002	11:24	5.45	9	49	Well Opened
	5/23/2002	12:35	21.2	35.5	51	"
	5/23/2002	14:23	47.2	96	58	"
	6/3/2002	10:00	45	90	30	"
1-VEW-3	3/6/2002	13:40	NA	0.1	NA	Well Closed
	3/29/2002	8:15	NA	0.6	NA	"
	5/23/2002	11:17	3.37	8.5	32	Well Opened
	5/23/2002	12:43	15.6	42	87	"
	5/23/2002	14:13	30.2	96	82	"
	6/3/2002	10:00	24	69	40	"
1-VEW-4	3/6/2002	13:40	NA	1.4	NA	Well Closed
	3/29/2002	8:15	NA	1.4	NA	"
	5/23/2002	10:45	2.61	13	8	Well Opened
	5/23/2002	NA	7.05	34.5	360	"
	5/23/2002	14:08	18.1	96	230	"
	6/3/2002	10:00	9	51	120	"
1-VEW-5	3/6/2002	13:40	NA	1.4	NA	Well Closed
	3/29/2002	8:15	NA	1.5	NA	"
	5/21/2002	11:38	6.9	12	59	Well Opened
	5/21/2002	13:02	15.6	19	16	"
	5/21/2002	12:45	32.1	34	29	"
	6/3/2002	10:00	NA	10	NA	Well Closed
1-VEW-6	3/6/2002	13:40	NA	2.2	NA	Well Closed
	3/29/2002	8:15	NA	1.6	NA	"
	5/21/2002	11:25	6.3	8	52	Well Opened
	5/21/2002	13:05	16.5	15	16	"
	5/21/2002	12:50	33.3	30	30	"
	6/3/2002	10:00	NA	7	NA	Well Closed

**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-7	3/6/2002	13:40	NA	1.9	NA	Well Closed
	3/29/2002	8:15	NA	0.1	NA	"
	5/23/2002	10:38	9.85	13	44	Well Opened
	5/23/2002	11:37	42.1	41	85	"
	5/23/2002	13:58	92	95	120	"
	6/3/2002	10:00	88	88	30	"
1-VEW-8A	3/6/2002	13:40	NA	0.5	NA	Well Closed
	3/29/2002	8:15	NA	0.6	NA	"
	5/22/2002	11:25	10.75	11.5	175	Well Opened
	5/22/2002	14:23	63	41.5	150	"
	5/22/2002	15:32	112	82	142	"
	6/3/2002	10:00	33	22	40	"
1-VEW-8B	3/6/2002	13:40	NA	0.3	NA	Well Closed
	3/29/2002	8:15	NA	0.6	NA	"
	5/17/2002	NA	3.7	14	565	Well Opened
	5/17/2002	NA	6.05	43	650	"
	5/17/2002	NA	11.3	72	510	"
	6/3/2002	10:00	10	90	60	"
1-VEW-9	3/6/2002	13:40	NA	NA	NA	Well Closed
	3/29/2002	8:15	NA	NA	NA	"
	5/23/2002	10:30	4.33	13	63	"
	5/23/2002	13:05	27.7	45	410	Well Opened
	5/23/2002	13:56	46.4	95	305	"
	6/3/2002	10:00	49	88	120	"
1-VEW-10A	3/6/2002	13:40	NA	NA	NA	Well Closed
	3/29/2002	8:15	NA	NA	NA	"
	5/16/2002	NA	2.7	26	270	Well Opened
	5/16/2002	NA	11	54	195	"
	5/16/2002	NA	19.8	18	35	"
	6/3/2002	10:00	19	65	16	"
1-VEW-10B	3/6/2002	13:40	NA	NA	NA	Well Closed
	3/29/2002	8:15	NA	NA	NA	"
	5/20/2002	13:05	2.74	20	290	Well Opened
	5/20/2002	15:45	12.7	25	750	"
	5/20/2002	16:53	21	78	600	"
	6/3/2002	10:00	29	60	290	"
1-VEW-11A	3/6/2002	13:40	NA	4.7	NA	Well Closed
	3/29/2002	8:15	NA	2.8	NA	"
	5/15/2002	18:08	5.3	40	400	Well Opened
	5/15/2002	19:22	5.6	>100	400	"
	5/15/2002	18:57	20.1	52	420	"
	6/3/2002	10:00	22	90	44	Well Closed

**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-11B	3/6/2002	13:40	NA	5.0	NA	Well Closed
	3/29/2002	8:15	NA	3.0	NA	"
	5/18/2002	9:40	2.16	23.5	270	Well Opened
	5/18/2002	11:50	7.7	38	340	"
	5/18/2002	13:35	15.5	60	280	"
	6/3/2002	10:00	29	50	75	"
1-VEW-12	3/6/2002	13:40	NA	3.5	NA	Well Closed
	3/29/2002	8:15	NA	2.2	NA	"
	5/21/2002	11:45	6.2	18.5	80	Well Opened
	5/21/2002	13:44	17.3	43	65	"
	5/21/2002	12:40	32.3	90	63	"
	6/3/2002	10:00	17	55	14	Well Closed
1-VEW-13A	3/6/2002	13:40	NA	3.0	NA	Well Closed
	3/29/2002	8:15	NA	2.0	NA	"
	5/15/2002	18:23	5.4	20	84	Well Opened
	5/15/2002	19:05	11.2	56	95	"
	5/15/2002	19:29	28.1	>100	120	"
	6/3/2002	10:00	59	87	14	"
1-VEW-13B	3/6/2002	13:40	NA	2.9	NA	Well Closed
	3/29/2002	8:15	NA	2.2	NA	"
	5/18/2002	NA	1.84	18.5	63	Well Opened
	5/18/2002	NA	8.3	33	220	"
	5/18/2002	NA	18.6	60.5	200	"
	6/3/2002	10:00	26	45	60	"
1-VEW-14A	3/6/2002	13:40	NA	0.4	NA	Well Closed
	3/29/2002	8:15	NA	0.4	NA	"
	5/15/2002	18:48	5.3	24	27	Well Opened
	5/15/2002	19:11	15	30	27	"
	5/15/2002	19:37	27	>100	40	"
	6/3/2002	10:00	22	64	14	Well Closed
1-VEW-14B	3/6/2002	13:40	NA	1.8	NA	Well Closed
	3/29/2002	8:15	NA	1.8	NA	"
	5/18/2002	NA	7.1	15.5	65	Well Opened
	5/18/2002	NA	34.2	33.5	95	"
	5/18/2002	NA	65	61	85	"
	6/3/2002	10:00	38	40	35	"
1-VEW-15A	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.0	NA	"
	5/22/2002	12:14	16.4	6.5	13.5	Well Opened
	5/22/2002	13:51	74	35	23	"
	5/22/2002	16:00	138	80	19.5	"
	6/3/2002	10:00	84	61	NA	Well Closed

**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-15B	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.0	NA	"
	5/17/2002	NA	12	4	12	Well Opened
	5/17/2002	NA	60.5	27	45	"
	5/17/2002	NA	117	72	40	"
	6/3/2002	10:00	74	34	NA	Well Closed
1-VEW-16A	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.2	NA	"
	5/22/2002	11:43	3.72	11	85	Well Opened
	5/22/2002	14:17	23.9	72	68	"
	5/22/2002	15:41	25.1	82	75	"
	6/3/2002	10:00	18	70	17	"
1-VEW-16B	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.5	NA	"
	5/17/2002	NA	3.6	11	510	Well Opened
	5/17/2002	NA	16.1	25	650	"
	5/17/2002	NA	39.3	74	610	"
	6/3/2002	10:00	22	65	80	"
1-VEW-17A	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.1	NA	"
	5/22/2002	12:00	6.55	7	24	Well Opened
	5/22/2002	13:57	29.2	35	9.5	"
	5/22/2002	15:54	58.5	80	5.6	"
	6/3/2002	10:00	NA	NA	NA	Well Closed
1-VEW-17B	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.2	NA	"
	5/17/2002	NA	4.5	6	110	Well Opened
	5/17/2002	NA	24.2	36	110	"
	5/17/2002	NA	41.5	72	110	"
	6/3/2002	10:00	40	58	6	"
1-VEW-18A	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.3	NA	"
	5/22/2002	12:18	2.8	33.5	12.2	Well Opened
	5/22/2002	13:45	9.25	72	10.5	"
	5/22/2002	16:08	19.4	80	9.5	"
	6/3/2002	10:00	NA	NA	NA	Well Closed
1-VEW-18B	3/6/2002	13:40	NA	0.2	NA	Well Closed
	3/29/2002	8:15	NA	0.4	NA	"
	5/17/2002	NA	3	2	7.9	Well Opened
	5/17/2002	NA	12.75	16	73	"
	5/17/2002	NA	32.5	72	85	"
	6/3/2002	10:00	32	86	22	"

**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-19A	3/6/2002	13:40	NA	0.0	NA	Well Closed
	3/29/2002	8:15	NA	0.0	NA	"
	5/22/2002	11:49	6.55	9.5	25.1	Well Opened
	5/22/2002	14:12	35.2	40	13	"
	5/22/2002	15:48	64.5	82	11.7	"
	6/3/2002	10:00	NA	15	NA	Well Closed
1-VEW-19B	3/6/2002	13:40	NA	0.6	NA	Well Closed
	3/29/2002	8:15	NA	0.6	NA	"
	5/17/2002	NA	3.5	14	59	Well Opened
	5/17/2002	NA	15.8	34	65	"
	5/17/2002	NA	43.1	74	60	"
	6/3/2002	10:00	16	87	5	"
1-VEW-20A	3/6/2002	13:40	NA	1.3	NA	Well Closed
	3/29/2002	8:15	NA	0.9	NA	"
	5/22/2002	12:23	2.87	9	11	Well Opened
	5/22/2002	13:39	14.1	31.5	11.8	"
	5/22/2002	16:12	33.1	80	4.2	"
	6/3/2002	10:00	NA	10	NA	Well Closed
1-VEW-20B	3/6/2002	13:40	NA	1.4	NA	Well Closed
	3/29/2002	8:15	NA	1.0	NA	"
	5/17/2002	10:30	2.32	14	100	Well Opened
	5/17/2002	NA	10.7	22	170	"
	5/17/2002	NA	32.6	72	105	"
	6/3/2002	10:00	33	61	18	"
1-VEW-21A	3/6/2002	13:40	NA	NA	NA	Well Closed
	3/29/2002	8:15	NA	NA	NA	"
	5/16/2002	NA	3.57	39	3040	Well Opened
	5/16/2002	NA	5.4	48	3200	"
	5/16/2002	NA	37.7	96	2900	"
	6/3/2002	10:00	28	55	NA	"
1-VEW-21B	3/6/2002	13:40	NA	NA	NA	Well Closed
	3/29/2002	8:15	NA	NA	NA	"
	5/20/2002	13:22	1.74	15	700	Well Opened
	5/20/2002	15:28	4.5	45	1030	"
	5/20/2002	17:24	36.3	79	1725	"
	5/21/2002	9:55	48.3	92	1200	"
	6/3/2002	10:00	47	90	NA	"

**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-22A	3/6/2002	13:40	NA	5.0	NA	Well Closed
	3/29/2002	8:15	NA	3.1	NA	"
	5/16/2002	NA	3.1	28	2200	Well Opened
	5/16/2002	NA	10.6	52	2400	"
	5/16/2002	NA	18.05	92	1600	"
	6/3/2002	10:00	18	74	80	"
1-VEW-22B	3/6/2002	13:40	NA	5.1	NA	Well Closed
	3/29/2002	8:15	NA	3.1	NA	"
	5/20/2002	13:30	4.12	16	37	Well Opened
	5/20/2002	15:20	21.1	40	72	"
	5/20/2002	17:35	37	77	179	"
	5/21/2002	10:07	43.6	91	230	"
	6/3/2002	10:00	51	88	20	"
1-VEW-23A	3/6/2002	13:40	NA	NA	NA	Well Closed
	3/29/2002	8:15	NA	NA	NA	"
	5/16/2002	NA	3.25	20	130	Well Opened
	5/16/2002	NA	12.5	49	45	"
	5/16/2002	NA	21.4	20	35	"
	6/3/2002	10:00	14	40	11	Well Closed
1-VEW-23B	3/6/2002	13:40	NA	NA	NA	Well Closed
	3/29/2002	8:15	NA	NA	NA	"
	5/20/2002	13:16	2.67	15	46	Well Opened
	5/20/2002	15:38	10	23	1700	"
	5/20/2002	17:08	19.5	79	9000	"
	5/21/2002	9:48	46.3	94	8000	"
	6/3/2002	10:00	37	90	600	"

**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-24A	1/18/2002	10:40	NA	88	> 9,999 *	Well opened
	1/24/2002	11:00	NA	75	> 9,999 *	"
	1/31/2002	13:45	33	23	> 9,999	"
	2/7/2002	16:50	31	26	> 9,999	"
	2/15/2002	17:51	NA	NA	> 9,999 *	"
	2/21/2002	17:44	46.5	30	> 9,999	"
	2/27/2002	14:17	32	30	> 9,999	"
	3/6/2002	13:40	94	64	> 9,999	"
	3/13/2002	16:20	45	30	> 9,999	"
	3/20/2002	8:30	42	32	> 9,999	"
	3/29/2002	8:15	9	28	4,000	"
	5/16/2002	NA	8.85	24	450	"
	5/16/2002	NA	33.7	42	550	"
	5/16/2002	NA	77.5	90	520	"
	6/3/2002	10:00	43	56	55	"
1-VEW-24B	12/13/2001	15:00	10	54	> 9,999 *	Well opened
	12/20/2001	14:15	5	47	> 800 *	"
	1/3/2002	13:15	32	48	> 320 *	"
	1/10/2002	14:00	30	48	> 700 *	"
	1/18/2002	8:25	25	90	> 760 *	"
	1/18/2002	10:40	NA	90	> 2,500 *	"
	1/24/2002	11:00	93	90	> 9,999 *	"
	1/31/2002	13:45	9	23	> 9,999	"
	2/7/2002	16:50	9	26	> 9,999	"
	2/15/2002	17:51	NA	NA	> 9,999 *	"
	2/21/2002	17:44	11	30	> 9,999	"
	2/27/2002	14:17	8	31	> 9,999	"
	3/6/2002	13:40	13	64	> 9,999	"
	3/13/2002	16:20	10.5	30	> 9,999	"
	3/20/2002	8:30	5.8	32	> 9,999	"
	3/29/2002	8:15	38	28	> 9,999	"
	5/20/2002	13:43	1.08	15	42	"
	5/20/2002	15:10	4.4	41	490	"
	5/20/2002	17:45	28.4	77	1010	"
	5/21/2002	10:16	41.4	91	635	"
	6/3/2002	10:00	30	70	100	"
1-VEW-25A	3/6/2002	13:40	NA	5.5	NA	Well Closed
	3/29/2002	8:15	NA	3.7	NA	"
	5/16/2002	NA	2.68	23	125	Well Opened
	5/16/2002	NA	13.5	44	135	"
	5/16/2002	NA	28	90	120	"
	6/3/2002	10:00	25	46	45	"
1-VEW-25B	3/6/2002	13:40	NA	5.9	NA	Well Closed
	3/29/2002	8:15	NA	3.5	NA	"
	5/18/2002	10:17	1.36	23	280	Well Opened
	5/18/2002	12:30	3.75	35.5	370	"
	5/18/2002	14:23	7.65	61	310	"
	6/3/2002	10:00	19	45	185	"



**TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 1/36 SVE system

WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-26A	3/6/2002	13:40	NA	3.7	NA	Well Closed
	3/29/2002	8:15	NA	2.7	NA	"
	5/16/2002	10:50	5.45	37	95	Well Opened
	5/16/2002	NA	24.5	90	190	"
	5/16/2002	NA	33.5	>100	95	"
	6/3/2002	10:00	55	85	105	"
1-VEW-26B	3/6/2002	13:40	NA	3.8	NA	Well Closed
	3/29/2002	8:15	NA	2.8	NA	"
	5/18/2002	NA	5.15	19.5	260	Well Opened
	5/18/2002	NA	23	35	280	"
	5/18/2002	NA	43.6	61	240	"
	6/3/2002	10:00	24	36	60	"

**Notes:**

ppmv: parts per million by volume

scfm: standard cubic foot per minute (acfm corrected for vacuum and temperature)

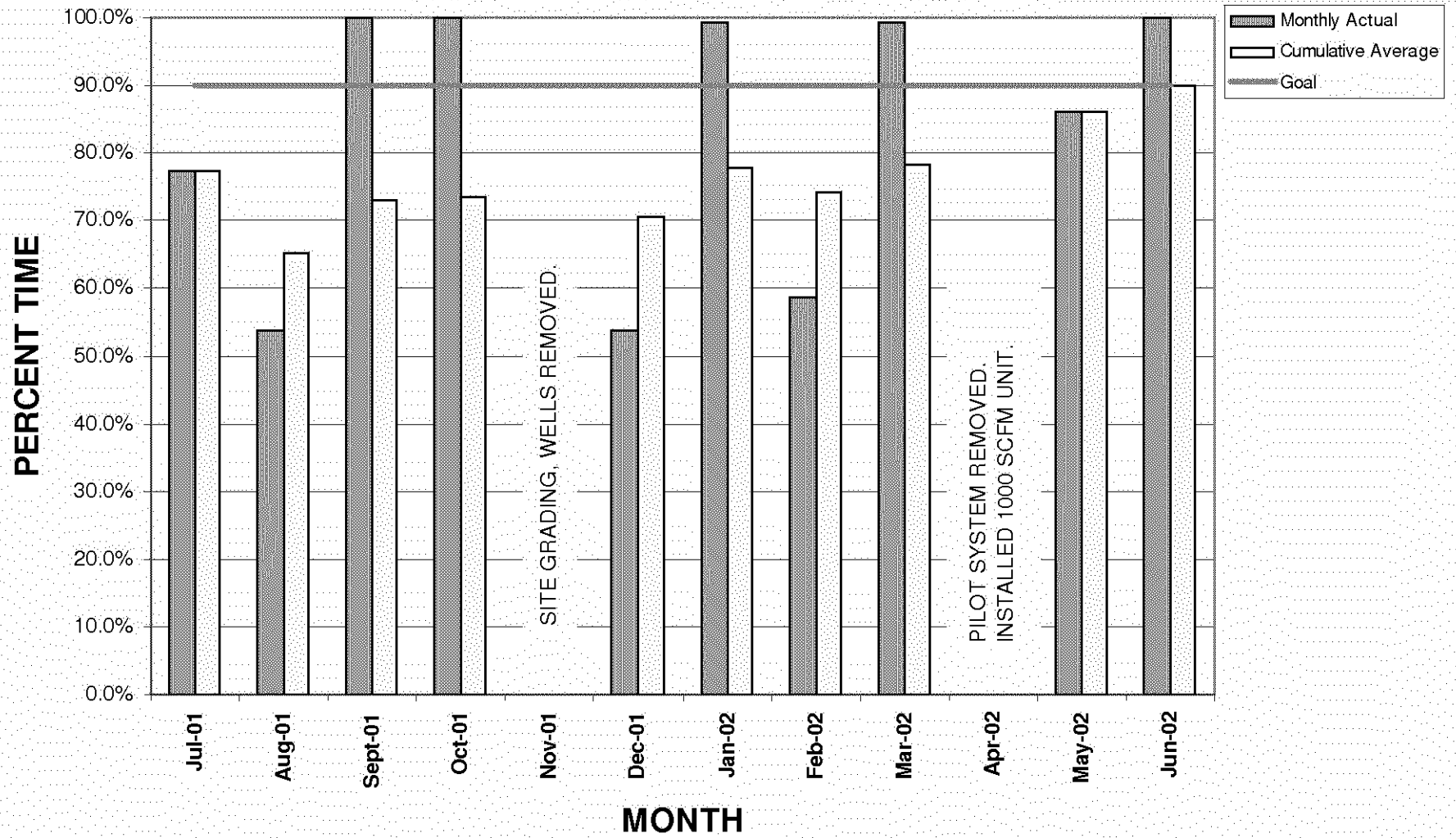
NA: data was not recorded or available

\* Well head readings not taken. Estimates based on diluted inlet concentrations

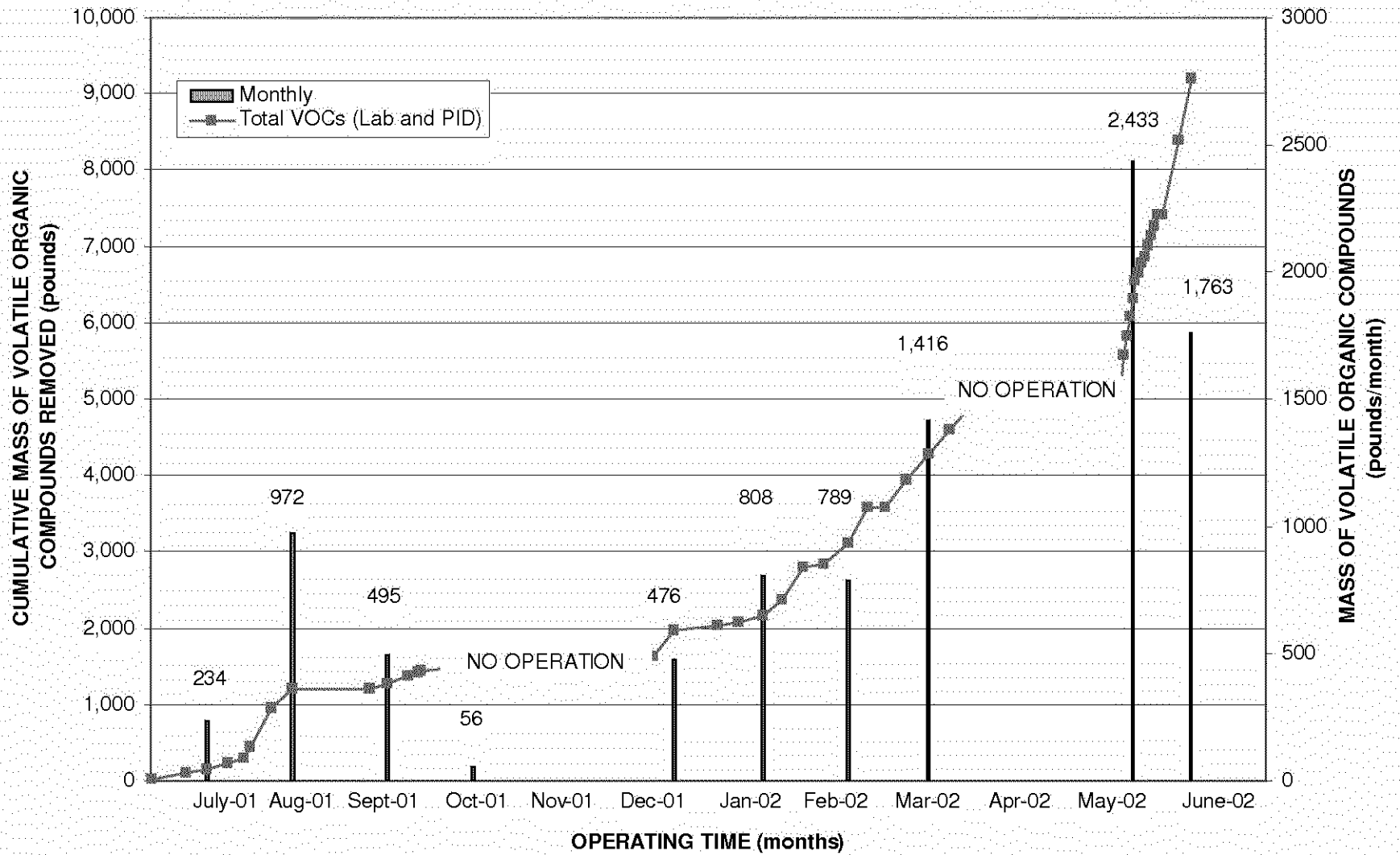
(1) Direct flow readings taken by hand-held TSI Veloci-calc Plus

(2) Measurements taken with a Foxboro OVA FID calibrated to 100 ppmv Hexane, results as Hexane

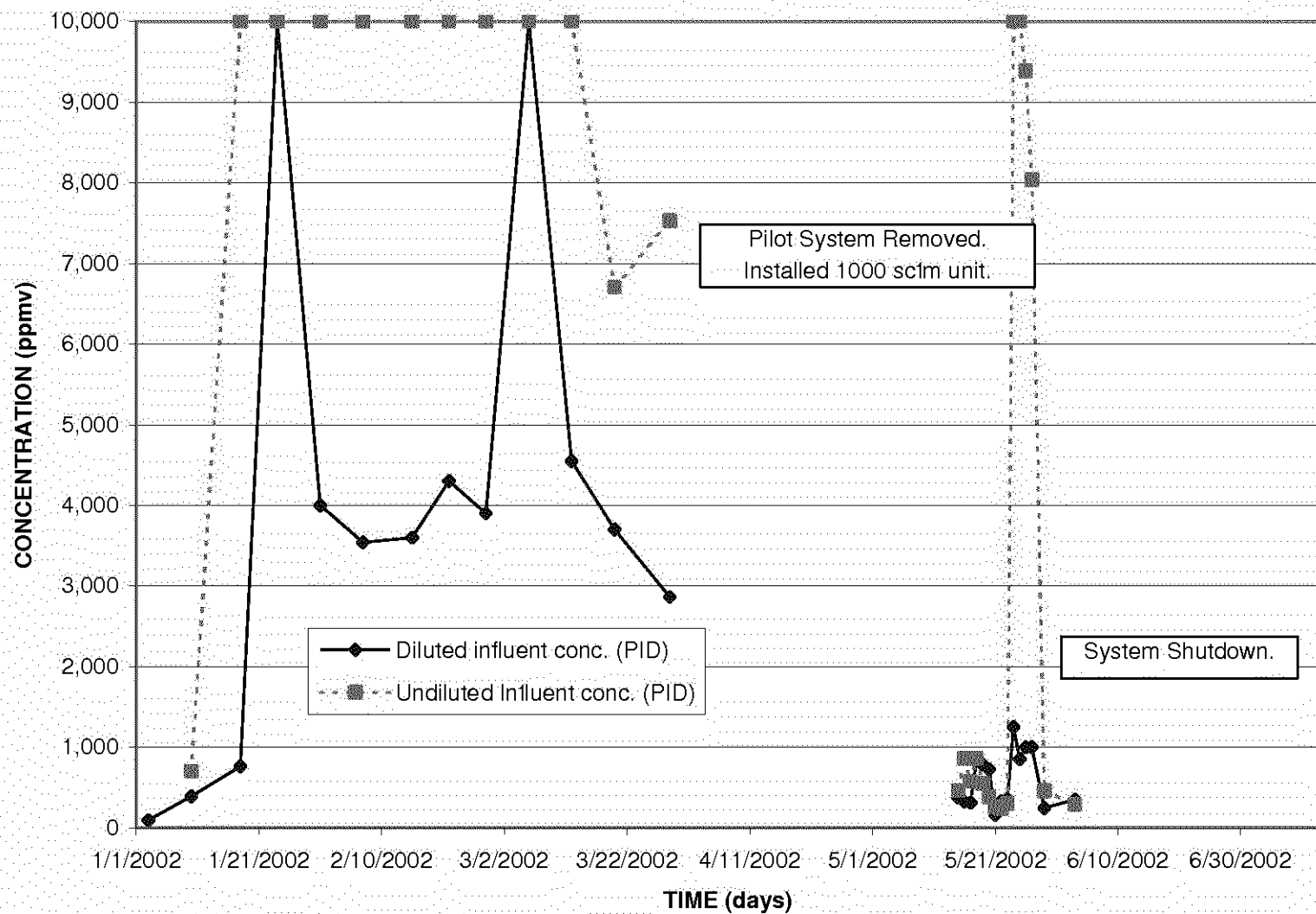
**GRAPH 1**  
**BUILDING 1/36 MONTHLY PERCENT OPERATION**



**GRAPH 2**  
**BUILDING 1/36 CUMULATIVE VOLATILE ORGANIC COMPOUND MASS REMOVED**



**GRAPH 3**  
**BUILDING 1/36 SVE SYSTEM TOTAL VOC INFLUENT CONCENTRATIONS**



**ATTACHMENT 2**

**BUILDING 2**

**SVE OPERATIONAL DATA**

**TABLE 4 - BUILDING 2 SVE SYSTEM INFLUENT LABORATORY DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

COMPOUND	SAMPLE DATE	1/3/2002	2/6/2002	3/6/2002	4/4/2002	5/3/2002	6/4/2002	7/3/2002
	SAMPLE TYPE	Diluted Inlet	Diluted Inlet	Diluted Inlet	Inlet	Inlet	Inlet	Inlet
	LAB ID	DILUTED_INLET_ BLDG_2_01/03/02	DILUTED_INLET_ BLDG_2_02/06/02	DILUTED_INLET_ BLDG_2_03/06/02	GAC0002D_AV0404 02_001	GAC0002D_AV0503 02_002	GAC0002D_AV0604 02_003	GAC0002D_AV0703 02_004
1,1 Dichloroethene (ppbv)		660	2,800	1,500	1,700	1,600	1,300	1,100
cis-1,2-Dichloroethene (ppbv)		ND	210	120	120	63	38	29
1,1-Dichloroethane (ppbv)		ND	220	86	96	57	38	28
1,1,1 Trichloroethane (ppbv)		280	800	370	310	150	560	82
Trichloroethene (ppbv)		7,500	31,000	26,000	19,000	13,000	6,100	3,800
Tetrachloroethene (ppbv)		84	210	100	180	190	110	80
Trichlorofluoromethane (ppbv)		19	ND	ND	45	44	23	30
Chloroform (ppbv)		ND	130	ND	260	360	540	640
Methylene Chloride (ppbv)		ND	ND	110	49	ND	18	12
Toluene (ppbv)		ND	ND	ND	ND	ND	520	11
Xylene (ppbv)		ND	ND	ND	ND	ND	18	ND

Notes:

ppbv = parts per billion by volume

ND = Below method detection limits

**TABLE 5 - BUILDING 2 SVE SYSTEM FIELD DATA**

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

DATE	HOUR METER	TIME	UNDILUTED FLOW RATE (1) (scfm)	DILUTED INLET FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	DILUTED INFLUENT PID (2) (ppmv)	MID POINT CARBON PID (2) (ppmv)	EFFLUENT CARBON PID (2) (ppmv)	COMMENTS
1/3/2002	785	15:00	575	795	29	32	0.0	0.0	
01/10/02	953	15:00	# 150	765	25	195	51.0	0.0	GAC Changeout
01/18/02	983	18:00	350	720	53	342	0.3	0.1	
01/24/02	1124	15:10	360	735	52	380	40.2	0.0	
01/31/02	1220	15:48	400	765	38	960	NR	0.0	Data after GAC Changeout
02/01/02	1238	10:00	400	760	27	450	0.0	0.0	
02/06/02	1360	13:00	390	760	20	365	87.0	0.2	GAC Changeout
02/08/02	1385	9:20	# 190	740	45	105	43.0	0.0	
02/15/02	1553	11:00	400	730	27	270	10.7	0.0	
02/21/02	1693	8:07	400	705	41	437	71.0	0.0	GAC Changeout
02/27/02	1838	10:30	380	590	68	465	37.0	0.0	
03/06/02	2004	9:00	378	600	68	310	53.2	0.2	GAC Changeout
03/13/02	2173	14:35	375	590	67	259	28.0	0.0	
03/20/02	2334	10:45	400	655	67	220	10.3	0.2	GAC Changeout
03/29/02	2549	10:00	385	605	61	168	16.0	0.1	
04/01/02	2627	16:50	640	630	59	261	47.4	7.5	
04/02/02	2646	11:40	660	680	61	256	59.0	12.7	GAC Changeout
04/04/02	2650	17:00	675	710	54	264	0.0	0.3	
04/05/02	2668	11:25	670	685	61	256	0.8	0.0	
04/06/02	2692	11:57	630	625	57	233	0.2	0.1	
04/07/02	2714	10:56	685	670	61	212	0.3	0.1	
04/08/02	2740	12:47	660	660	61	232	0.6	0.0	
04/09/02	2759	8:45	650	635	65	252	0.3	0.1	
04/10/02	2789	14:30	650	645	57	224	3.9	0.2	
04/11/02	2817	19:35	715	740	41	129	39.0	0.2	
04/12/02	2839	18:37	710	710	57	337	6.1	0.4	
04/17/02	2904	15:20	695	690	57	153	* 4.8	* 3.8	
04/23/02	3049	15:51	665	665	61	184	* 9.4	* 2.8	
05/03/02	3240	12:48	630	665	54	164	* 2.6	* 1.3	GAC Changeout
05/09/02	3391	19:10	645	640	54	158	#* 23.0	* 0.8	
05/16/02	3549	8:43	675	660	61	145	* 20.0	* 2.8	GAC Changeout
05/23/02	3722	16:20	650	620	57	15.4	* 14.0	* 9.9	
05/30/02	3887	14:00	645	610	57	19.1	* 14.0	* 13.0	
06/04/02	4005	12:00	630	620	57	* 14.0	* 19.0	* 7.0	
06/13/02	4215	8:35	655	645	58	* 18.2	* 8.4	* 2.0	GAC Changeout
06/20/02	4384	10:17	650	640	57	* 10.0	* 7.0	* 1.0	
06/27/02	4554	12:34	635	625	57	* 12.8	* 9.2	* 6.5	

**Notes:**

- (1) Direct flow readings taken by hand-held TSI Veloci-calc Plus
- (2) Measurements taken with a MiniRae 2000 PID calibrated to 100 ppmv Hexane, results as Hexane unless otherwise noted
- # Readings reading not considered representative of actual concentrations due to moisture or vacuum interference
- \* Measurements taken with Foxboro OVA-128 calibrated to Hexane. Results as Hexane.

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-1A	11/27/2001	13:00	39	20		1,200	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	22		140	Well Opened
	1/10/2002	15:00	NA	1.3		NA	"
	1/18/2002	18:00	39	48		340	"
	1/24/2002	15:10		1.7		NA	"
	1/31/2002	15:48	30	31		200	"
	2/1/2002	10:00	22	23		96	"
	2/6/2002	13:00	16	16		180	"
	2/15/2002	11:00	20	19		98	Well Closed
	3/20/2002	14:00	NA	45		12	"
	3/29/2002	14:20	3.2	9.5		NA	"
	3/30/2002	10:58	1	11		NA	"
	3/31/2002	10:31	0.5	11		NA	"
	4/1/2002	16:50	NA	11		NA	"
	4/2/2002	11:40	NA	11		NA	"
	4/4/2002	17:00	NA	8.4		NA	"
	4/5/2002	11:30	NA	10.5		NA	"
	4/6/2002	12:00	NA	10		NA	"
	4/7/2002	11:00	NA	11		NA	"
	4/8/2002	12:45	NA	10		NA	"
	4/9/2002	8:45	NA	13		NA	"
	4/10/2002	14:30	NA	12		NA	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	NA	8		NA	"
	4/17/2002	15:20	NA	4.5		NA	"
	4/23/2002	15:51	NA	10		NA	"
	5/3/2002	12:48	NA	5		NA	"
	5/9/2002	19:10	NA	11		NA	"
	5/23/2002	16:20	NA	10.5		NA	"
	6/13/2002	8:35	NA	11		NA	"
	6/20/2002	10:17	NA	11		NA	"
	6/27/2002	12:34	NA	10		NA	"
	7/3/2002	11:00	NA	10		NA	"
2-VIEW-1B	11/27/2001	13:00	11	17		9,999	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	29		2,800	Well Opened
	1/10/2002	15:00	NA	1.6		NA	"
	1/18/2002	18:00	NA	2.9		NA	Well Closed
	1/24/2002	15:10	17	48		9,999	"
	1/31/2002	15:48	8	31		9,999	"
	2/1/2002	10:00	10	23		6,500	"
	2/6/2002	13:00	5.3	16		6,800	"
	2/15/2002	11:00	5.5	19		3,980	"
	2/27/2002	10:30	14.2	52		4,230	"
	3/6/2002	9:00	8.5	48		2,790	"
	3/13/2002	14:35	9	50		4,240	"
	3/20/2002	10:45	12	50		1,300	"
	3/29/2002	10:00	10.1	54		1,800	Well Opened
	3/29/2002	14:20	18.1	46		1,350	"
	3/30/2002	10:58	9	48		1,478	"
	3/31/2002	10:31	8.4	48		1,744	"
	4/1/2002	16:50	7.4	49		1,475	"
	4/2/2002	11:40	6.8	51		1,535	"
	4/4/2002	17:00	6.8	47		1,565	"
	4/5/2002	11:30	9.4	49		1,720	"
	4/6/2002	12:00	10.8	49		1,429	"
	4/7/2002	11:00	17	50		1,474	"
	4/8/2002	12:45	9.2	50		1,434	"
	4/9/2002	8:45	6.5	51		1,684	"
	4/10/2002	14:30	6.2	49		1,635	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	9.4	49		NA	"
	4/17/2002	15:20	9	43		1,439	"
	4/23/2002	15:51	9.15	50		NA	"
	5/3/2002	12:48	11	41.5		642	"
	5/9/2002	19:10	8	43		795	"
	5/23/2002	16:20	17.1	48.5		* 25	"
	6/13/2002	8:35	9.6	48		* 48	"
	6/20/2002	10:17	48	7.8		* 50	"
	6/27/2002	12:34	9.2	48		* 49	"
	7/3/2002	11:00	7	47		489	"



## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-2	11/27/2001	13:00	60	25		1,300	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	70	20		740	Well Opened
	1/10/2002	15:00	NA	1.5		NA	Well Closed
	1/18/2002	18:00	NA	3.2		NA	"
	1/24/2002	15:10	NA	2		NA	"
	1/31/2002	15:48	60	31		9,999	Well Opened
	2/1/2002	10:00	29	22		335	"
	2/6/2002	13:00	18	15		260	"
	2/15/2002	11:00	23	19		94	Well Closed
	3/20/2002	14:00	NA	47		18	"
	3/29/2002	14:20	24	19		8	"
	3/30/2002	10:58	24	21		8	Well Opened
	3/31/2002	10:31	24	20		3	"
	4/1/2002	16:50	25	21		4	"
	4/2/2002	11:40	NA	13		NA	Well Closed
	4/4/2002	17:00	NA	9		NA	"
	4/5/2002	11:30	NA	12.5		NA	"
	4/6/2002	12:00	NA	12		NA	"
	4/7/2002	11:00	NA	13		NA	"
	4/8/2002	12:45	NA	12		NA	"
	4/9/2002	8:45	NA	14		NA	"
	4/10/2002	14:30	NA	12		NA	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	NA	8.5		NA	"
	4/17/2002	15:20	NA	4		NA	"
	4/23/2002	15:51	NA	11		NA	"
	5/3/2002	12:48	NA	6		NA	"
	5/9/2002	19:10	NA	11		NA	"
	5/23/2002	16:20	NA	11		NA	"
	6/13/2002	8:35	NA	12		NA	"
	6/20/2002	10:17	NA	12		NA	"
	6/27/2002	12:34	NA	11		NA	"
	7/3/2002	11:00	NA	12		NA	"
2-VIEW-3A	11/27/2001	13:00	20	20		710	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	12	22		160	Well Opened
	1/10/2002	15:00	NA	1.3		NA	"
	1/18/2002	18:00	23	50		560	"
	1/24/2002	15:10	11	49		470	"
	1/31/2002	15:48	17	32		360	"
	2/1/2002	10:00	7	23		250	"
	2/6/2002	13:00	7	17		210	"
	2/15/2002	11:00	6.5	19		85	Well Closed
	3/20/2002	14:00	NA	50		NA	"
	3/29/2002	10:00	94	54		31	Well Opened
	3/29/2002	14:20	1	9		NA	Well Closed
	3/30/2002	10:58	0.6	11		NA	"
	3/31/2002	10:31	0.5	10		NA	"
	4/1/2002	16:50	NA	10		NA	"
	4/2/2002	11:40	NA	12		NA	"
	4/4/2002	17:00	NA	8		NA	"
	4/5/2002	11:30	NA	11.5		NA	"
	4/6/2002	12:00	NA	10.5		NA	"
	4/7/2002	11:00	NA	11		NA	"
	4/8/2002	12:45	NA	12		NA	"
	4/9/2002	8:45	NA	13		NA	"
	4/10/2002	14:30	NA	10		NA	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	NA	8		NA	"
	4/17/2002	15:20	NA	4		NA	"
	4/23/2002	15:51	NA	10		NA	"
	5/3/2002	12:48	NA	5.5		NA	"
	5/9/2002	19:10	NA	10		NA	"
	5/23/2002	16:20	NA	10		NA	"
	6/13/2002	8:35	NA	12		NA	"
	6/20/2002	10:17	NA	12		NA	"
	6/27/2002	12:34	NA	11		NA	"
	7/3/2002	11:00	NA	10		NA	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-3B	11/27/2001	13:00	11	25.0		2,250	Initial Startup
	11/28/2001	13:15	NA	0.1		NA	Well Closed
	11/30/2001	14:20	NA	0.7		NA	"
	12/3/2001	17:10	NA	0.2		NA	"
	12/4/2001	10:15	NA	0.9		NA	"
	12/5/2001	16:30	NA	0.6		NA	"
	12/6/2001	8:30	NA	0.8		NA	"
	12/7/2001	7:30	NA	1.2		NA	"
	12/8/2001	16:00	NA	0.1		NA	"
	12/9/2001	13:00	NA	0.0		NA	"
	12/10/2001	16:00	NA	0.4		NA	"
	12/11/2001	11:00	NA	1.4		NA	"
	12/12/2001	19:15	8	29.5		1,900	Well Opened
	12/13/2001	11:15	8	29.0		1,675	"
	12/20/2001	15:10	17	39.0		1,345	"
	12/28/2001	11:00	15	23.0		220	"
	1/10/2002	15:00	NA	1.5		NA	Well Closed
	1/18/2002	18:00	NA	3.3		NA	"
	1/24/2002	15:10	NA	3.0		NA	"
	1/31/2002	15:48	7	32.0		390	Well Opened
	2/1/2002	10:00	10	23.0		220	"
	2/6/2002	13:00	7	17.0		230	"
	2/15/2002	11:00	5.7	19		320	"
	3/20/2002	14:00	NA	47		203	"
	3/29/2002	14:20	18	46		296	"
	3/30/2002	10:58	8.4	48		226	"
	3/31/2002	10:31	9	48		231	"
	4/1/2002	16:50	9.3	48		197	"
	4/2/2002	11:40	11.3	52		172	"
	4/4/2002	17:00	10.1	47		262	"
	4/5/2002	11:30	13.8	50		142	"
	4/6/2002	12:00	49	14.1		116	"
	4/7/2002	11:00	15.1	56		105	"
	4/8/2002	12:45	17.1	51		87	"
	4/9/2002	8:45	16.9	52		106	"
	4/10/2002	14:30	19.2	49		88	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	19	49		NA	"
	4/17/2002	15:20	23	43		156	"
	4/23/2002	15:51	26.3	50		NA	"
	5/3/2002	12:48	28	42		51	"
	5/9/2002	19:10	24	42		42	"
	5/23/2002	16:20	48	28.6		* 4.8	"
	6/13/2002	8:35	31.5	48		* 7.0	"
	6/20/2002	10:17	28.4	48		* 7.0	"
	6/27/2002	12:34	31.3	48		* 5.2	"
	7/3/2002	11:00	28	47		67	"
2-VIEW-4	11/27/2001	13:00	30	25		1,250	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	15		450	Well Opened
	1/10/2002	15:00	NA	1.8		NA	"
	1/18/2002	18:00	NA	3.8		NA	"
	1/24/2002	15:10	NA	2.3		NA	"
	1/31/2002	15:48	33	31		940	"
	2/1/2002	10:00	23	23.5		565	"
	2/6/2002	13:00	21	17		680	"
	2/15/2002	11:00	20.5	19		400	Well Closed
	3/20/2002	14:00	NA	41		17	"
	3/29/2002	14:20	39	45		60	Well Opened
	3/30/2002	10:58	51.5	48		167	"
	3/31/2002	10:31	55.5	47		235	"
	4/1/2002	16:50	51.5	48		270	"
	4/2/2002	11:40	56	50		257	"
	4/4/2002	17:00	55	46		276	"
	4/5/2002	11:30	58	48.5		264	"
	4/6/2002	12:00	56	48		232	"
	4/7/2002	11:00	54.5	49.5		223	"
	4/8/2002	12:45	59.5	47		232	"
	4/9/2002	8:45	58	50		272	"
	4/10/2002	14:30	55.5	47		234	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	48	61		NA	"
	4/17/2002	15:20	58.5	41		252	"
	4/23/2002	15:51	61.5	49		NA	"
	5/3/2002	12:48	57	41		209	"
	5/9/2002	19:10	48	43		179	"
	5/23/2002	16:20	56	47		* 17.2	"
	6/13/2002	8:35	58	46		* 13.8	"
	6/20/2002	10:17	54.5	48		* 15.0	"
	6/27/2002	12:34	61.5	47		* 12.2	"
	7/3/2002	11:00	54	46		79	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-5	11/27/2001	13:00	90	25		1,075	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	17		800	Well Opened
	1/10/2002	15:00	NA	2.8		NA	"
	1/18/2002	18:00	NA	3.4		NA	"
	1/24/2002	15:10	NA	2.5		NA	"
	1/31/2002	15:48	65	30		1,150	"
	2/1/2002	10:00	47	20		700	"
	2/6/2002	13:00	32	16		910	"
	2/15/2002	11:00	36	19		570	Well Closed
	3/20/2002	14:00	NA	43		75	"
	3/29/2002	14:20	81	39		76	"
	3/30/2002	10:58	80.5	41		99	Well Opened
	3/31/2002	10:31	80.5	41		102	"
	4/1/2002	16:50	80	41		107	"
	4/2/2002	11:40	86	43		91	"
	4/4/2002	17:00	83.5	38		104	"
	4/5/2002	11:30	86	42		80	"
	4/6/2002	12:00	85	41		69	"
	4/7/2002	11:00	94.5	41.5		63	"
	4/8/2002	12:45	87	40		61	"
	4/9/2002	8:45	87	42		78	"
	4/10/2002	14:30	85.5	40		69	"
	4/11/2002	19:35	NA	NA		NA	Well Closed
	4/12/2002	18:37	NA	11		NA	"
	4/17/2002	15:20	NA	6		NA	"
	4/23/2002	15:51	NA	13.5		NA	"
	5/3/2002	12:48	NA	7		NA	"
	5/9/2002	19:10	NA	14		NA	"
	5/23/2002	16:20	NA	15		NA	"
	6/13/2002	8:35	NA	15		NA	"
	6/20/2002	10:17	NA	15.5		NA	"
	6/27/2002	12:34	NA	14.5		NA	"
	7/3/2002	11:00	NA	15		NA	"
2-VEW-6	11/27/2001	13:00	52	25		9,999	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	15		625	Well Opened
	1/10/2002	15:00	NA	2.3		NA	Well Closed
	1/18/2002	18:00	NA	3.6		NA	"
	1/24/2002	15:10	NA	2.5		NA	"
	1/31/2002	15:48	40	30		3,130	Well Opened
	2/1/2002	10:00	27	20		1,500	"
	2/6/2002	13:00	21	16		1,530	"
	2/15/2002	11:00	25	19		945	Well Closed
	2/27/2002	10:30	68	35		520	"
	3/6/2002	9:00	81	33		433	"
	3/13/2002	14:35	81	34		335	"
	3/20/2002	10:45	62	30		280	"
	3/29/2002	10:00	56	28		241	Well Opened
	3/29/2002	14:20	85	46		246	"
	3/30/2002	10:58	78.5	44		263	"
	3/31/2002	10:31	87	42		262	"
	4/1/2002	16:50	81	43		245	"
	4/2/2002	11:40	86	45		208	"
	4/4/2002	17:00	87	40		222	"
	4/5/2002	11:30	98	43		209	"
	4/6/2002	12:00	94.5	42.5		172	"
	4/7/2002	11:00	93.5	43.5		168	"
	4/8/2002	12:45	96.5	43		165	"
	4/9/2002	8:45	95.5	44		208	"
	4/10/2002	14:30	87	42		165	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	104	44		NA	"
	4/17/2002	15:20	107	37		158	"
	4/23/2002	15:51	108	44		NA	"
	5/3/2002	12:48	98	37		110	"
	5/9/2002	19:10	83	39		105	"
	5/23/2002	16:20	88.5	44		8	"
	6/13/2002	8:35	89	45		10	"
	6/20/2002	10:17	84.5	44		8	"
	6/27/2002	12:34	86.5	43		7	"
	7/3/2002	11:00	81	43		40	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-7A	11/27/2001	13:00	13	25		360	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	20		100	Well Opened
	1/10/2002	15:00	NA	1.4		NA	"
	1/18/2002	18:00	17	50		600	"
	1/24/2002	15:10	15	48		940	"
	1/31/2002	15:48	8	30		1,100	"
	2/1/2002	10:00	6	21		730	"
	2/6/2002	13:00	16	4.5		775	"
	2/15/2002	11:00	6	18		333	Well Closed
	3/20/2002	14:00	NA	53		17	"
	3/29/2002	14:20	11.6	41		25	Well Opened
	3/30/2002	10:58	12	44		39	"
	3/31/2002	10:31	13.6	43.5		54	"
	4/1/2002	16:50	14.1	43		73	"
	4/2/2002	11:40	13	46		73	"
	4/4/2002	17:00	11.8	41.5		81	"
	4/5/2002	11:30	15.4	45		59	"
	4/6/2002	12:00	14.4	44		51	"
	4/7/2002	11:00	14.4	45		51	"
	4/8/2002	12:45	14.4	45		47	"
	4/9/2002	8:45	13.7	45		55	"
	4/10/2002	14:30	13.3	44		53	"
	4/11/2002	19:35	NA	NA		NA	Well Closed
	4/12/2002	18:37	104	9		NA	"
	4/17/2002	15:20	107	5		NA	"
	4/23/2002	15:51	108	12		NA	"
	5/3/2002	12:48	98	6		NA	"
	5/9/2002	19:10	83	11		NA	"
	5/23/2002	16:20	NA	12		NA	"
	6/13/2002	8:35	NA	13		NA	"
	6/20/2002	10:17	NA	12		NA	"
	6/27/2002	12:34	NA	12		NA	"
	7/3/2002	11:00	NA	12		NA	"
2-VIEW-7B	11/27/2001	13:00	60	25.0		600	Initial Startup
	11/28/2001	13:15	NA	0.3		NA	Well Closed
	11/30/2001	14:20	NA	0.9		NA	"
	12/3/2001	17:10	NA	0.2		NA	"
	12/4/2001	10:15	NA	1.2		NA	"
	12/5/2001	16:30	NA	0.8		NA	"
	12/6/2001	8:30	NA	1.0		NA	"
	12/7/2001	7:30	NA	1.4		NA	"
	12/8/2001	16:00	NA	0.1		NA	"
	12/9/2001	13:00	NA	0.0		NA	"
	12/10/2001	16:00	NA	0.5		NA	"
	12/11/2001	11:00	NA	1.6		NA	"
	12/12/2001	19:15	75	27.0		5,450	Well Opened
	12/13/2001	11:15	85	29.0		4,380	"
	12/20/2001	15:10	95	34.0		9,999	"
	12/28/2001	11:00	75	20.0		100	"
	1/3/2002	15:00	75	20.0		100	"
	1/10/2002	15:00	NA	1.9		NA	Well Closed
	1/18/2002	18:00	NA	3.5		NA	"
	1/24/2002	15:10	NA	2.4		NA	"
	1/31/2002	15:48	57	29.0		1,060	Well Opened
	2/1/2002	10:00	40	21.0		920	"
	2/6/2002	13:00	34	17.0		850	"
	2/15/2002	11:00	34	18		850	"
	2/27/2002	10:30	70	36		800	"
	3/6/2002	9:00	65	34		677	"
	3/13/2002	14:35	78	35		495	"
	3/20/2002	10:45	91	35		420	"
	3/29/2002	10:00	64	44		422	"
	3/29/2002	14:20	77.5	40		385	"
	3/30/2002	10:58	58.5	42		406	"
	3/31/2002	10:31	59	41.5		431	"
	4/1/2002	16:50	78	42		375	"
	4/2/2002	11:40	81	44		351	"
	4/4/2002	17:00	85	39.5		421	"
	4/5/2002	11:30	107	42.5		390	"
	4/6/2002	12:00	104	42		323	"
	4/7/2002	11:00	102	43		310	"
	4/8/2002	12:45	101	44		310	"
	4/9/2002	8:45	106	44		352	"
	4/10/2002	14:30	80	42		319	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	114	43		NA	"
	4/17/2002	15:20	114.5	36		305	"
	4/23/2002	15:51	109	44		NA	"
	5/3/2002	12:48	58	36.5		178	"
	5/9/2002	19:10	73	39		164	"
	5/23/2002	16:20	87.5	43		* 11	"
	6/13/2002	8:35	86.5	44		* 9.5	"
	6/20/2002	10:17	39.5	44		* 9.0	"
	6/27/2002	12:34	86.5	43		* 6.5	"
	7/3/2002	11:00	78	42		44	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-8A	11/27/2001	13:00	14	25		1,675	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	10	20		240	Well Opened
	1/10/2002	15:00	NA	2.5		NA	"
	1/18/2002	18:00	24	50		855	"
	1/24/2002	15:10	14	48		1,030	"
	1/31/2002	15:48	6	30		980	"
	2/1/2002	10:00	7	21		1,010	"
	2/6/2002	13:00	6	16		1,400	"
	2/15/2002	11:00	6.5	18		480	Well Closed
	3/20/2002	14:00	NA	55		24	"
	3/29/2002	14:20	7	43		59	Well Opened
	3/30/2002	10:58	7	43		76	"
	3/31/2002	10:31	9.8	43		81	"
	4/1/2002	16:50	9.4	45		79	"
	4/2/2002	11:40	9.5	46		117	"
	4/4/2002	17:00	8.8	42		130	"
	4/5/2002	11:30	11.4	45		78	"
	4/6/2002	12:00	10.8	44.5		63	"
	4/7/2002	11:00	10.4	44		59	"
	4/8/2002	12:45	11	45		58	"
	4/9/2002	8:45	10.1	47		69	"
	4/10/2002	14:30	9.7	44		69	"
	4/11/2002	19:35	NA	NA		NA	Well Closed
	4/12/2002	18:37	NA	11		NA	"
	4/17/2002	15:20	NA	6		NA	"
	4/23/2002	15:51	NA	13		NA	"
	5/3/2002	12:48	NA	1		NA	"
	5/9/2002	19:10	NA	2		NA	"
	5/23/2002	16:20	NA	14		NA	"
	6/13/2002	8:35	NA	15		NA	"
	6/20/2002	10:17	NA	15		NA	"
	6/27/2002	12:34	NA	14		NA	"
	7/3/2002	11:00	NA	15		NA	"
2-VIEW-8B	11/27/2001	13:00	56	30		3,750	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	50	20		990	Well Opened
	1/10/2002	15:00	64	21		2,750	"
	1/18/2002	18:00	NA	3.7		NA	Well Closed
	1/24/2002	15:10	NA	2.8		NA	"
	1/31/2002	15:48	46	29		1,300	Well Opened
	2/1/2002	10:00	30	21		1,370	"
	2/6/2002	13:00	22	16		790	"
	2/15/2002	11:00	22	19		1,830	"
	2/27/2002	10:30	76	44		1,185	"
	3/6/2002	9:00	54	42		930	"
	3/13/2002	14:35	90	42		715	"
	3/20/2002	10:45	103	41		510	"
	3/29/2002	10:00	62	44		472	"
	3/29/2002	14:20	60	42		500	"
	3/30/2002	10:58	62.5	44		712	"
	3/31/2002	10:31	60.5	44.5		724	"
	4/1/2002	16:50	60	43		740	"
	4/2/2002	11:40	64	46		664	"
	4/4/2002	17:00	68	41		660	"
	4/5/2002	11:30	64	43.5		704	"
	4/6/2002	12:00	61.5	43.5		668	"
	4/7/2002	11:00	63.5	45.5		681	"
	4/8/2002	12:45	66	44		669	"
	4/9/2002	8:45	65.5	45		787	"
	4/10/2002	14:30	65	43		719	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	41.8	26		NA	"
	4/17/2002	15:20	51.5	19.5		276	"
	4/23/2002	15:51	50.5	28.5		NA	"
	5/3/2002	12:48	31.1	22		281	"
	5/9/2002	19:10	23	21		362	"
	5/23/2002	16:20	38.4	29		* 39	"
	6/13/2002	8:35	25.2	30		* 20	"
	6/20/2002	10:17	40.9	30		* 25	"
	6/27/2002	12:34	28.6	29		* 17	"
	7/3/2002	11:00	18	28		121	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H <sub>2</sub> O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-9	11/27/2001	13:00	38	30		2,550	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	19		390	Well Opened
	1/10/2002	15:00	NA	3.2		NA	Well Closed
	1/18/2002	18:00	NA	4.8		NA	"
	1/24/2002	15:10	NA	4.2		NA	"
	1/31/2002	15:48	24	29		1,970	Well Opened
	2/1/2002	10:00	17	21		1,100	"
	2/6/2002	13:00	14	17		750	"
	2/15/2002	11:00	14	20		795	"
	2/27/2002	10:30	98	60		355	"
	3/6/2002	9:00	94	56		350	"
	3/13/2002	14:35	91	56		305	"
	3/20/2002	10:45	93	58		243	"
	3/29/2002	10:00	77	50		241	"
	3/29/2002	14:20	52.5	44		334	"
	3/30/2002	10:58	51	45		532	"
	3/31/2002	10:31	53	45		1,325	"
	4/1/2002	16:50	52	45		610	"
	4/2/2002	11:40	56	48		542	"
	4/4/2002	17:00	60	44		568	"
	4/5/2002	11:30	57.5	45.5		479	"
	4/6/2002	12:00	57	46		546	"
	4/7/2002	11:00	56	47		906	"
	4/8/2002	12:45	56.5	47		497	"
	4/9/2002	8:45	55	47		472	"
	4/10/2002	14:30	57	46		530	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	49.3	44		NA	"
	4/17/2002	15:20	52.5	38		283	"
	4/23/2002	15:51	47.1	44.5		NA	"
	5/3/2002	12:48	54	34		239	"
	5/9/2002	19:10	43	40		300	"
	5/23/2002	16:20	47.3	44		* 25	"
	6/13/2002	8:35	47.8	46		* 23	"
	6/20/2002	10:17	45.4	47		* 20	"
	6/27/2002	12:34	49.7	45		* 19	"
	7/3/2002	11:00	48	45		112	"
2-VIEW-10A	11/27/2001	13:00	20	30		1,400	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	22		45	Well Opened
	1/10/2002	15:00	NA	2.3		NA	"
	1/18/2002	18:00	33	48		2,750	"
	1/24/2002	15:10	45	45		1,890	"
	1/31/2002	15:48	18	28		1,450	"
	2/1/2002	10:00	13	20		1,350	"
	2/6/2002	13:00	11	17		1,250	Well Closed
	2/15/2002	11:00	12.5	19		1,085	Well Opened
	3/20/2002	14:00	NA	57		38	"
	3/29/2002	14:20	13	22		15	"
	3/30/2002	10:58	13	24		23	"
	3/31/2002	10:31	13	24		30	"
	4/1/2002	16:50	13.6	24		49	"
	4/2/2002	11:40	10	23		60	"
	4/4/2002	17:00	9.8	18		82	"
	4/5/2002	11:30	11.9	21		50	"
	4/6/2002	12:00	10.5	21.5		56	"
	4/7/2002	11:00	10.9	22		57	"
	4/8/2002	12:45	10.9	22		147	"
	4/9/2002	8:45	10.5	21		74	"
	4/10/2002	14:30	12.4	22		65	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	11.8	21		NA	"
	4/17/2002	15:20	11.9	16		68	"
	4/23/2002	15:51	10.5	23.5		NA	"
	5/3/2002	12:48	11.4	16		49	"
	5/9/2002	19:10	NA	12		NA	"
	5/23/2002	16:20	24.8	35		* 6.4	"
	6/13/2002	8:35	26.4	36		* 10	"
	6/20/2002	10:17	24.4	36		* 11	"
	6/27/2002	12:34	27.3	35		* 8.0	"
	7/3/2002	11:00	25	32		59	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-10B	11/27/2001	13:00	45	30		1,620	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	32	18		700	Well Opened
	1/10/2002	15:00	NA	4.2		NA	Well Closed
	1/18/2002	18:00	NA	4.4		NA	"
	1/24/2002	15:10	NA	4		NA	"
	1/31/2002	15:48	26	28		6,000	Well Opened
	2/1/2002	10:00	15	21		3,710	"
	2/6/2002	13:00	11	17		3,000	"
	2/15/2002	11:00	14	19		2,580	"
	2/27/2002	10:30	43	37		1,400	"
	3/6/2002	9:00	39	35		1,080	"
	3/13/2002	14:35	39	32		788	"
	3/20/2002	10:45	49	29		690	"
	3/29/2002	10:00	36	29		488	"
	3/29/2002	14:20	15	25		350	"
	3/30/2002	10:58	15	27		533	"
	3/31/2002	10:31	16	28		670	"
	4/1/2002	16:50	15	28		690	"
	4/2/2002	11:40	11	27		287	"
	4/4/2002	17:00	10.9	21.5		297	"
	4/5/2002	11:30	12.1	26.5		364	"
	4/6/2002	12:00	10.6	26		362	"
	4/7/2002	11:00	12.1	27		324	"
	4/8/2002	12:45	11	28		327	"
	4/9/2002	8:45	11.1	26		383	"
	4/10/2002	14:30	12.6	26		370	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	52.5	26.5		NA	"
	4/17/2002	15:20	65.5	39		780	"
	4/23/2002	15:51	67.5	47		NA	"
	5/3/2002	12:48	74	37		447	"
	5/9/2002	19:10	63	40		345	"
	5/23/2002	16:20	69	44		* 36	"
	6/13/2002	8:35	69.5	45		* 42	"
	6/20/2002	10:17	65	46		* 35	"
	6/27/2002	12:34	70.5	44		* 27	"
	7/3/2002	11:00	65	44		148	"
2-VIEW-11A	11/27/2001	13:00	27	25		1,700	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	21		110	Well Opened
	1/10/2002	15:00	NA	22		725	"
	1/18/2002	18:00	52	47		620	"
	1/24/2002	15:10	79	43		350	"
	1/31/2002	15:48	39	29		280	"
	2/1/2002	10:00	28	20		175	"
	2/6/2002	13:00	24	16		100	"
	2/15/2002	11:00	27	19		90	Well Closed
	3/20/2002	14:00	NA	46		20	"
	3/29/2002	14:20	24	8		NA	"
	3/30/2002	10:58	1	9		NA	"
	3/31/2002	10:31	0.4	10		NA	"
	4/1/2002	16:50	NA	9		NA	"
	4/2/2002	11:40	NA	10		NA	"
	4/4/2002	17:00	NA	7		NA	"
	4/5/2002	11:30	NA	9		NA	"
	4/6/2002	12:00	NA	9		NA	"
	4/7/2002	11:00	NA	9.5		NA	"
	4/8/2002	12:45	NA	10		NA	"
	4/9/2002	8:45	NA	10		NA	"
	4/10/2002	14:30	NA	10		NA	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	NA	8		NA	"
	4/17/2002	15:20	NA	5		NA	"
	4/23/2002	15:51	NA	9.5		NA	"
	5/3/2002	12:48	NA	4		NA	"
	5/9/2002	19:10	NA	8		NA	"
	5/23/2002	16:20	NA	10		NA	"
	6/13/2002	8:35	NA	10		NA	"
	6/20/2002	10:17	NA	10		NA	"
	6/27/2002	12:34	NA	9		NA	"
	7/3/2002	11:00	NA	10		NA	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-11B	11/27/2001	13:00	19	30.0		1,040	Initial Startup
	11/28/2001	13:15	NA	27.5		3,100	Well Opened
	11/30/2001	14:20	NA	27.0		NA	"
	12/3/2001	17:10	NA	26.5		NA	"
	12/4/2001	10:15	NA	27.5		1,510	"
	12/5/2001	16:30	NA	29.0		3,200	"
	12/6/2001	8:30	NA	28.8		3,015	"
	12/7/2001	7:30	NA	29.0		3,600	"
	12/8/2001	16:00	NA	29.0		3,100	"
	12/9/2001	13:00	NA	27.0		NA	"
	12/10/2001	16:00	NA	28.5		4,700	"
	12/11/2001	11:00	NA	30.0		4,100	Well Closed
	12/12/2001	19:15	NA	2.1		NA	"
	12/13/2001	11:15	NA	0.9		NA	"
	12/20/2001	15:10	NA	1.7		NA	"
	12/28/2001	11:00	15	22.0		520	Well Opened
	1/3/2002	15:00	15	22.0		520	"
	1/10/2002	15:00	NA	4.0		NA	"
	1/18/2002	18:00	NA	4.8		NA	"
	1/24/2002	15:10	NA	4.5		NA	"
	1/31/2002	15:48	12	29.0		850	"
	2/1/2002	10:00	6	21.0		590	"
	2/6/2002	13:00		16.0		340	"
	2/15/2002	11:00	5.5	19		415	Well Closed
	3/20/2002	14:00	NA	53		303	"
	3/29/2002	14:20	18	39		586	Well Opened
	3/30/2002	10:58	16	41		531	"
	3/31/2002	10:31	17.5	42		1,651	"
	4/1/2002	16:50	17	41		565	"
	4/2/2002	11:40	17	44		515	"
	4/4/2002	17:00	19.6	38.5		536	"
	4/5/2002	11:30	18.4	42		484	"
	4/6/2002	12:00	18.6	42.5		464	"
	4/7/2002	11:00	16.5	43.5		461	"
	4/8/2002	12:45	18.4	44		474	"
	4/9/2002	8:45	17	43		471	"
	4/10/2002	14:30	17	42		463	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	23.7	47		NA	"
	4/17/2002	15:20	28.4	41		465	"
	4/23/2002	15:51	19.7	47		NA	"
	5/3/2002	12:48	25.3	36.5		NA	"
	5/9/2002	19:10	15	41		383	"
	5/23/2002	16:20	16.6	45		* 4.1	"
	6/13/2002	8:35	15.7	46		* 3.5	"
	6/20/2002	10:17	15.3	47		* 29	"
	6/27/2002	12:34	16.7	45		* 28	"
	7/3/2002	11:00	16	45		178	"
2-VIEW-12	11/27/2001	13:00	82	30		2,500	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	19		390	Well Opened
	1/10/2002	15:00	NA	3.4		NA	Well Closed
	1/18/2002	18:00	NA	5.5		NA	"
	1/24/2002	15:10	NA	4.8		NA	"
	1/31/2002	15:48	75	28		815	Well Opened
	2/1/2002	10:00	49	20		540	"
	2/6/2002	13:00	39	17		325	"
	2/15/2002	11:00	44	19		350	Well Closed
	3/20/2002	14:00	NA	40		61	"
	3/29/2002	14:20	117	41		67	Well Opened
	3/30/2002	10:58	120	42		92	"
	3/31/2002	10:31	121	43		539	"
	4/1/2002	16:50	121	43		154	"
	4/2/2002	11:40	125	45		145	"
	4/4/2002	17:00	124	41		180	"
	4/5/2002	11:30	124	42.5		108	"
	4/6/2002	12:00	121	43.5		110	"
	4/7/2002	11:00	125	44.5		101	"
	4/8/2002	12:45	120	44		100	"
	4/9/2002	8:45	122	44		88	"
	4/10/2002	14:30	125	43		132	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	122	43		NA	"
	4/17/2002	15:20	117	38		55	"
	4/23/2002	15:51	117	44		NA	"
	5/3/2002	12:48	119	34		36	"
	5/9/2002	19:10	107	37		35	"
	5/23/2002	16:20	113	41.5		* 2.0	"
	6/13/2002	8:35	121	43		* 7.0	"
	6/20/2002	10:17	115	44		* 7.0	"
	6/27/2002	12:34	120	42		* 6.8	"
	7/3/2002	11:00	116	42		35	"



## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-13A	11/27/2001	13:00	17	25		1,700	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	10	23		95	Well Opened
	1/10/2002	15:00	12	32		380	"
	1/18/2002	18:00	22	48		375	"
	1/24/2002	15:10	45	44		420	"
	1/31/2002	15:48	23	29		900	"
	2/1/2002	10:00	18	20		390	"
	2/6/2002	13:00	16	17		375	"
	2/15/2002	11:00	15	19		189	"
	3/20/2002	14:00	NA	47		161	"
	3/29/2002	14:20	1	6.5		NA	Well Closed
	3/30/2002	10:58	0.3	7.5		NA	"
	3/31/2002	10:31	0.7	8		NA	"
	4/1/2002	16:50	NA	9		NA	"
	4/2/2002	11:40	NA	10		NA	"
	4/4/2002	17:00	NA	6		NA	"
	4/5/2002	11:30	NA	8		NA	"
	4/6/2002	12:00	NA	8		NA	"
	4/7/2002	11:00	NA	9		NA	"
	4/8/2002	12:45	NA	10		NA	"
	4/9/2002	8:45	NA	10		NA	"
	4/10/2002	14:30	NA	9		NA	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	NA	7		NA	"
	4/17/2002	15:20	NA	4.5		NA	"
	4/23/2002	15:51	NA	10		NA	"
	5/3/2002	12:48	NA	5		NA	"
	5/9/2002	19:10	NA	9		NA	"
	5/23/2002	16:20	NA	11		NA	"
	6/13/2002	8:35	NA	11		NA	"
	6/20/2002	10:17	NA	11		NA	"
	6/27/2002	12:34	NA	9		NA	"
	7/3/2002	11:00	NA	8		NA	"
2-VIEW-13B	11/27/2001	13:00	40	25		1,850	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	35	21		990	Well Opened
	1/10/2002	15:00	NA	5		NA	"
	1/18/2002	18:00	NA	4.7		NA	"
	1/24/2002	15:10	NA	5.1		NA	"
	1/31/2002	15:48	22	29		3,550	"
	2/1/2002	10:00	12	20		2,500	"
	2/6/2002	13:00	12	17		1,900	"
	2/15/2002	11:00	9.6	19		1,590	Well Closed
	3/20/2002	14:00	NA	53		303	"
	3/29/2002	14:20	6	24.5		170	Well Opened
	3/30/2002	10:58	8	26		289	"
	3/31/2002	10:31	5.6	26		327	"
	4/1/2002	16:50	5.8	27		291	"
	4/2/2002	11:40	7.6	30		621	"
	4/4/2002	17:00	10	23		632	"
	4/5/2002	11:30	8.6	28		605	"
	4/6/2002	12:00	8.5	28		626	"
	4/7/2002	11:00	8	28.5		582	"
	4/8/2002	12:45	7.5	29		794	"
	4/9/2002	8:45	8	29		697	"
	4/10/2002	14:30	8.3	26		623	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	31.1	47		NA	"
	4/17/2002	15:20	38.2	40.5		567	"
	4/23/2002	15:51	27.5	47		NA	"
	5/3/2002	12:48	33.5	37.5		388	"
	5/9/2002	19:10	27	41		340	"
	5/23/2002	16:20	32.4	45		* 25	"
	6/13/2002	8:35	38	45.5		* 42	"
	6/20/2002	10:17	38	46.5		* 25	"
	6/27/2002	12:34	44.4	45.5		* 14	"
	7/3/2002	11:00	44	44		85	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-14A	11/27/2001	13:00	18	25		1,300	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	19	23		390	Well Opened
	1/10/2002	15:00	NA	22		700	"
	1/18/2002	18:00	40	48		520	"
	1/24/2002	15:10	75	42		415	"
	1/31/2002	15:48	52	28		140	"
	2/1/2002	10:00	43	20		140	"
	2/6/2002	13:00	44	17		102	"
	2/15/2002	11:00	46	18		50	"
	3/20/2002	14:00	NA	42		58	"
	3/29/2002	14:20	18	44		NA	Well Closed
	3/30/2002	10:58	0.3	6		NA	"
	3/31/2002	10:31	0.1	7		NA	"
	4/1/2002	16:50	NA	7		NA	"
	4/2/2002	11:40	NA	8		NA	"
	4/4/2002	17:00	NA	6.5		NA	"
	4/5/2002	11:30	NA	9		NA	"
	4/6/2002	12:00	NA	9		NA	"
	4/7/2002	11:00	NA	9.5		NA	"
	4/8/2002	12:45	NA	10.5		NA	"
	4/9/2002	8:45	NA	10		NA	"
	4/10/2002	14:30	NA	10		NA	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	20	20		NA	"
	4/17/2002	15:20	33	16		27	"
	4/23/2002	15:51	24	22		NA	"
	5/3/2002	12:48	26.6	14		23	"
	5/9/2002	19:10	NA	8		NA	"
	5/23/2002	16:20	NA	9		NA	"
	6/13/2002	8:35	NA	9		NA	"
	6/20/2002	10:17	NA	9		NA	"
	6/27/2002	12:34	NA	8.5		NA	"
	7/3/2002	11:00	NA	9		NA	"
2-VIEW-14B	11/27/2001	13:00	33	25.0		1,750	Initial Startup
	11/28/2001	13:15	NA	27.5		3,000	Well Opened
	11/30/2001	14:20	NA	27.0		NA	"
	12/3/2001	17:10	NA	26.0		NA	"
	12/4/2001	10:15	NA	28.0		960	"
	12/5/2001	16:30	NA	28.0		2,400	"
	12/6/2001	8:30	NA	28.2		2,930	"
	12/7/2001	7:30	NA	29.5		3,875	"
	12/8/2001	16:00	NA	29.0		2,650	"
	12/9/2001	13:00	NA	24.0		NA	"
	12/10/2001	16:00	NA	28.0		4,075	"
	12/11/2001	11:00	NA	30.0		3,850	Well Closed
	12/12/2001	19:15	NA	1.9		NA	"
	12/13/2001	11:15	NA	0.8		NA	"
	12/20/2001	15:10	NA	1.6		NA	"
	12/28/2001	11:00	40	21.0		830	Well Opened
	1/3/2002	15:00	40	21.0		830	"
	1/10/2002	15:00	NA	4.2		NA	"
	1/18/2002	18:00	NA	5.9		NA	"
	1/24/2002	15:10	NA	5.2		NA	"
	1/31/2002	15:48	21	28.0		1,015	"
	2/1/2002	10:00	16	20.0		765	"
	2/6/2002	13:00	NA	17.0		600	"
	2/15/2002	11:00	13	18		520	Well Closed
	3/20/2002	14:00	NA	47		79	"
	3/29/2002	14:20	24.5	27		163	Well Opened
	3/30/2002	10:58	16.7	28.5		94	"
	3/31/2002	10:31	17	29		191	"
	4/1/2002	16:50	16	29		208	"
	4/2/2002	11:40	16	30		190	"
	4/4/2002	17:00	16.4	29.5		240	"
	4/5/2002	11:30	17.3	28.5		206	"
	4/6/2002	12:00	16.9	29		200	"
	4/7/2002	11:00	17.6	29.5		191	"
	4/8/2002	12:45	17.8	30.5		189	"
	4/9/2002	8:45	16.7	29		207	"
	4/10/2002	14:30	17.6	28		210	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	11	26		NA	"
	4/17/2002	15:20	11.3	20		210	"
	4/23/2002	15:51	10.5	28		NA	"
	5/3/2002	12:48	10.9	16		129	"
	5/9/2002	19:10	11	23		58	"
	5/23/2002	16:20	10.8	9		NA	"
	6/13/2002	8:35	11	26		* 5.2	"
	6/20/2002	10:17	10.4	27		*7.0	"
	6/27/2002	12:34	12.2	25.5		* 4.0	"
	7/3/2002	11:00	11	25		32	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility  
**Location:** Torrance, California  
**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-15A	11/27/2001	13:00	41	30		1,170	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	23	18		67	Well Opened
	1/10/2002	15:00	NA	1.9		NA	"
	1/18/2002	18:00	61	47		810	"
	1/24/2002	15:10	83	43		585	"
	1/31/2002	15:48	37	28		900	"
	2/1/2002	10:00	27	20		300	"
	2/6/2002	13:00	23	16		290	"
	2/15/2002	11:00	29	18		150	"
	3/29/2002	14:20	1	5		NA	Well Closed
	3/30/2002	10:58	0.5	6		NA	"
	3/31/2002	10:31	4	6		NA	"
	4/1/2002	16:50	NA	7		NA	"
	4/2/2002	11:40	NA	8		NA	"
	4/4/2002	17:00	NA	4		NA	"
	4/5/2002	11:30	NA	6		NA	"
	4/6/2002	12:00	NA	6.5		NA	"
	4/7/2002	11:00	NA	7		NA	"
	4/8/2002	12:45	NA	8		NA	"
	4/9/2002	8:45	NA	8		NA	"
	4/10/2002	14:30	NA	7		NA	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	NA	6		NA	"
	4/17/2002	15:20	NA	3.5		NA	"
	4/23/2002	15:51	NA	7		NA	"
	5/3/2002	12:48	NA	3		NA	"
	5/9/2002	19:10	NA	6		NA	"
	5/23/2002	16:20	NA	7		NA	"
	6/13/2002	8:35	NA	7		NA	"
	6/20/2002	10:17	NA	7		NA	"
	6/27/2002	12:34	NA	7		NA	"
	7/3/2002	11:00	NA	7		NA	"
2-VIEW-15B	11/27/2001	13:00	22	25		1,120	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	21		575	Well Opened
	1/10/2002	15:00	23	22		2,100	"
	1/18/2002	18:00	61	47		810	"
	1/24/2002	15:10	NA	5.1		NA	"
	1/31/2002	15:48	10	28		1,400	"
	2/1/2002	10:00	7	21		925	"
	2/6/2002	13:00	6	16		765	"
	2/15/2002	11:00	6	18		665	Well Closed
	3/20/2002	14:00	NA	51		113	"
	3/29/2002	14:20	19	39		300	Well Opened
	3/30/2002	10:58	18	41		414	"
	3/31/2002	10:31	18	41		412	"
	4/1/2002	16:50	16	29		208	"
	4/2/2002	11:40	18	44		360	"
	4/4/2002	17:00	18.8	39		385	"
	4/5/2002	11:30	20.5	40.5		315	"
	4/6/2002	12:00	18.5	42		311	"
	4/7/2002	11:00	17.6	43		276	"
	4/8/2002	12:45	20	44		289	"
	4/9/2002	8:45	18.7	44		284	"
	4/10/2002	14:30	18.2	42		277	"
	4/11/2002	19:35	NA	NA		NA	"
	4/12/2002	18:37	18.4	48		NA	"
	4/17/2002	15:20	24.5	41		254	"
	4/23/2002	15:51	18	48		NA	"
	5/3/2002	12:48	20.3	37		148	"
	5/9/2002	19:10	18	40		169	"
	5/23/2002	16:20	18.6	45		* 13	"
	6/13/2002	8:35	21.7	47		* 14	"
	6/20/2002	10:17	19	46		* 18	"
	6/27/2002	12:34	21.2	45		* 11	"
	7/3/2002	11:00	29	45		72	"
2-VIEW-16A	5/9/2002	19:10	10	41		13	Well Opened
	5/23/2002	16:20	NA	12.5		NA	Well Closed
	6/13/2002	8:35	NA	16		NA	"
	6/20/2002	10:17	NA	16		NA	"
	6/27/2002	12:34	NA	12		NA	"
	7/3/2002	11:00	NA	12		NA	"
2-VIEW-16B	5/9/2002	19:10	45	30		46	Well Opened
	5/23/2002	16:20	51.5	33		* 4.7	"
	6/13/2002	8:35	54	36		* 8.0	"
	6/20/2002	10:17	50	38		* 7.0	"
	6/27/2002	12:34	50	32.5		* 8.2	"
	7/3/2002	11:00	52	32		37	"

## TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

**Site Name:** BRC Former C-6 Facility

**Location:** Torrance, California

**System:** Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H <sub>2</sub> O)	FID (ppmv)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VIEW-17A	5/9/2002	19:10	15	23		2	Well Opened
	5/23/2002	16:20	NA	6		NA	Well Closed
	6/13/2002	8:35	NA	6.5		NA	"
	6/20/2002	10:17	NA	6.5		NA	"
	6/27/2002	12:34	NA	6		NA	"
	7/3/2002	11:00	NA	6		NA	"
2-VIEW-17B	5/9/2002	19:10	77	42		9	Well Opened
	5/23/2002	16:20	NA	8		NA	Well Closed
	6/13/2002	8:35	NA	8.5		NA	"
	6/20/2002	10:17	NA	9		NA	"
	6/27/2002	12:34	NA	8		NA	"
	7/3/2002	11:00	NA	8		NA	"

**Notes:**

ppmv: parts per million by volume

scfm: standard cubic foot per minute (scfm corrected for vacuum and temperature)

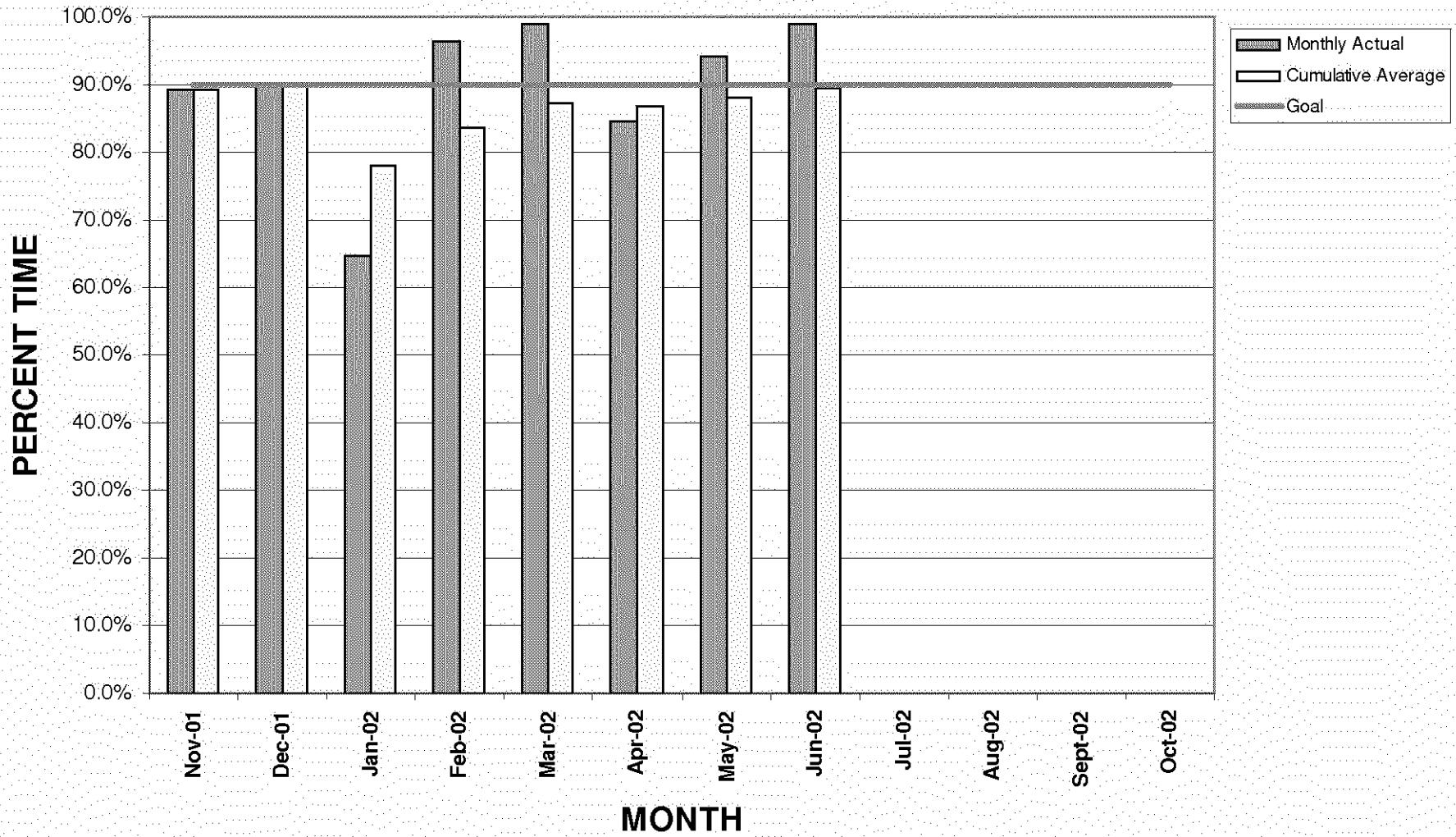
NA: data was not recorded or available

(1) Direct flow readings taken by hand-held TSI Veloci-calc Plus

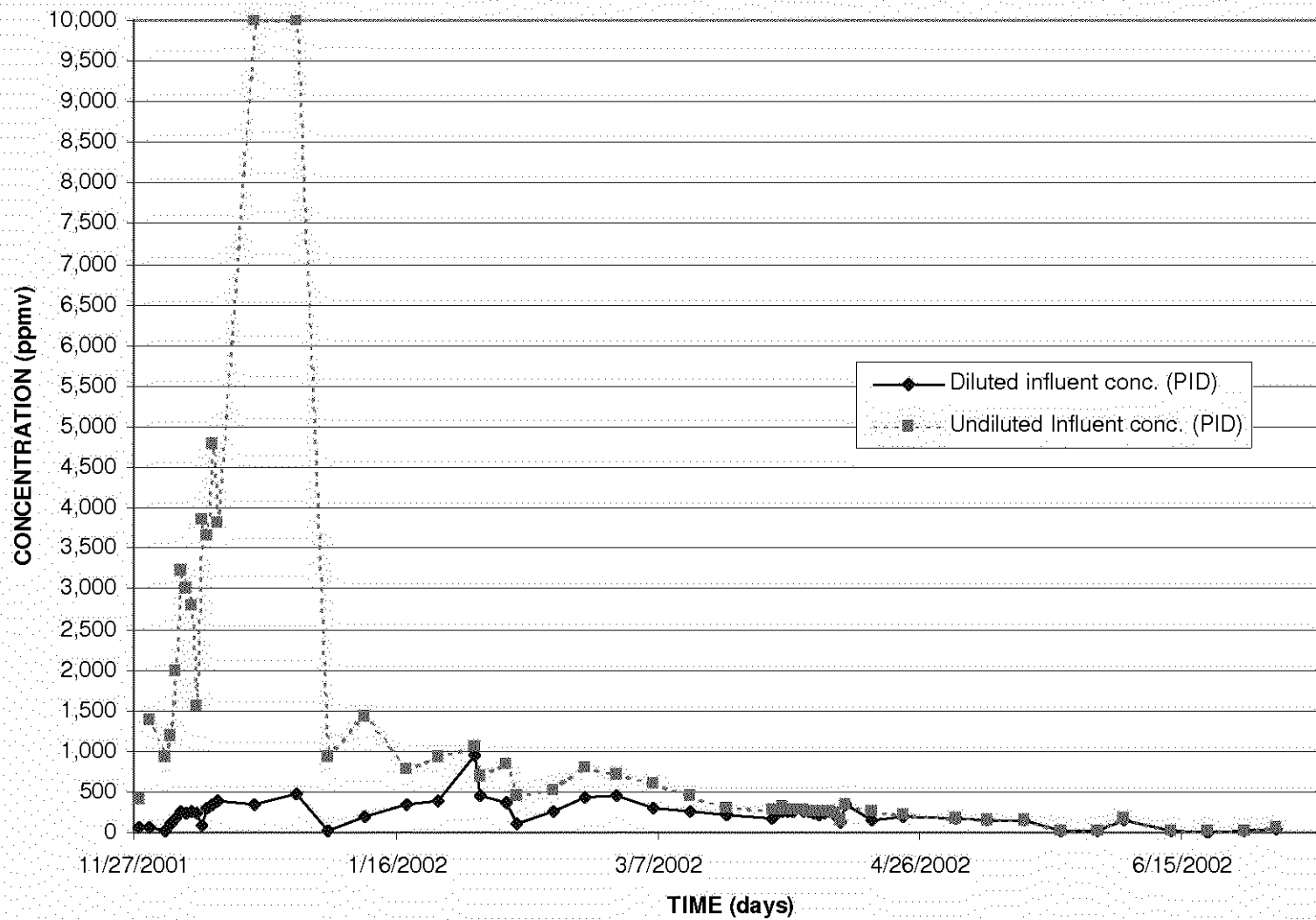
(2) Measurements taken with a MiniRae 2000 PID calibrated to 100 ppmv Hexane, results as Hexane.

\* Measurements taken with Foxboro OVA-128 calibrated to Hexane. Results as Hexane.

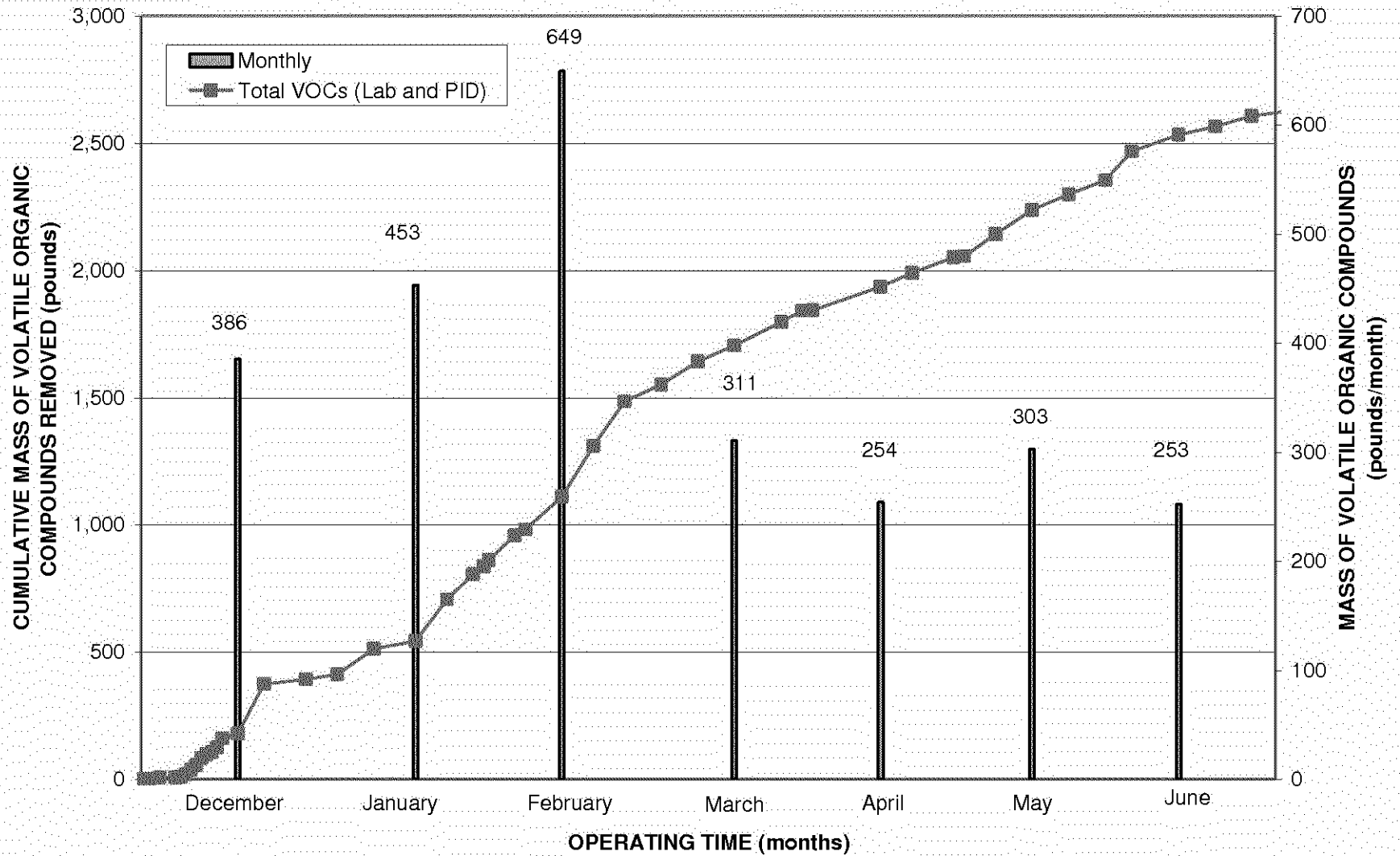
**GRAPH 4**  
**BUILDING 2 MONTHLY PERCENT OPERATION**



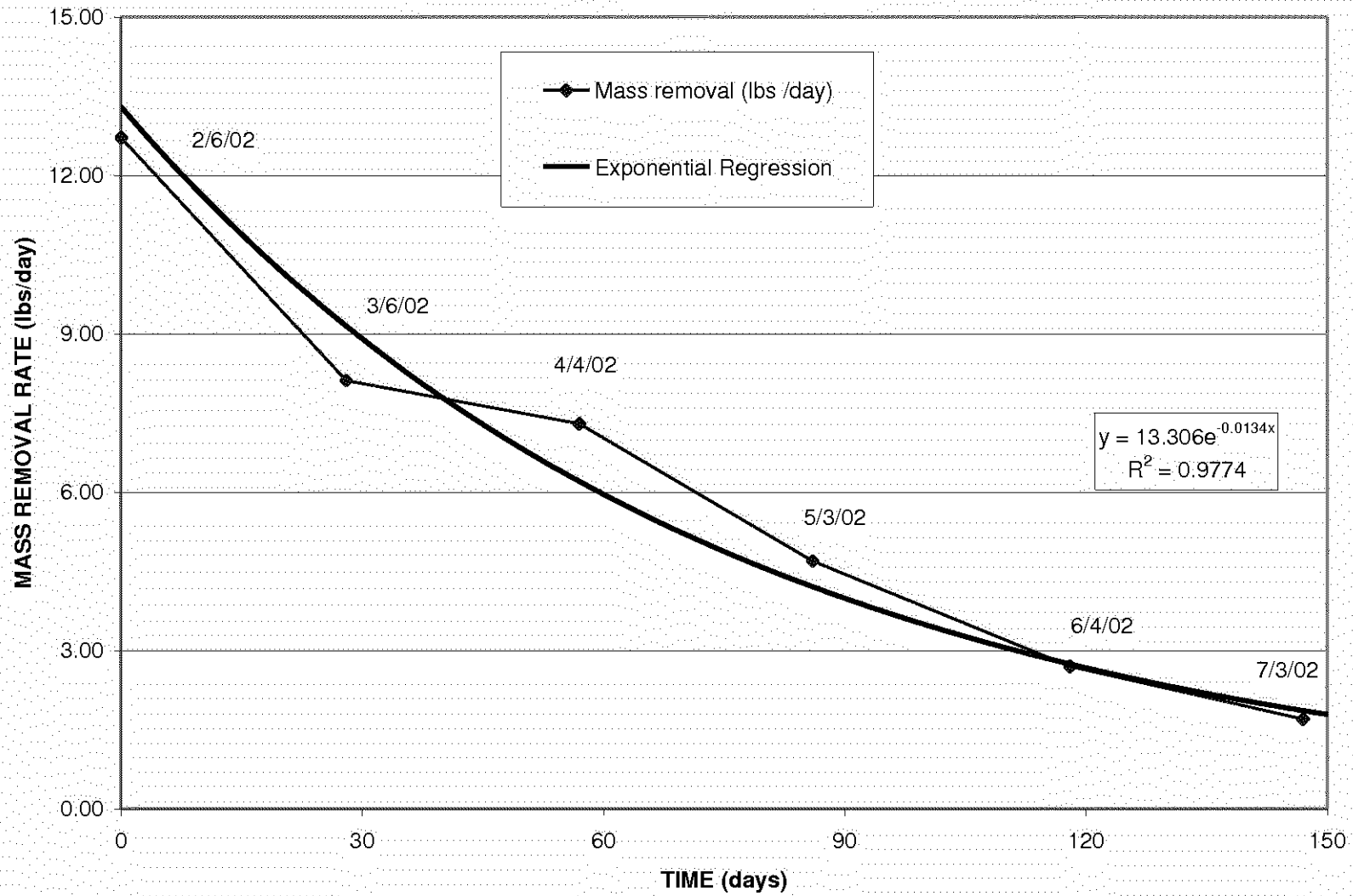
**GRAPH 5**  
**BUILDING 2 SVE SYSTEM TOTAL VOC INFLUENT CONCENTRATIONS**



**GRAPH 6**  
**BUILDING 2 CUMULATIVE VOLATILE ORGANIC COMPOUND MASS REMOVED**



**GRAPH 7**  
**BUILDING 2 SVE SYSTEM REGRESSION ANALYSIS**  
**MASS REDUCTION**





**GRAPH 8**  
**BUILDING 2 SVE SYSTEM REGRESSION ANALYSIS**  
**CONCENTRATION REDUCTION**

